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## Central Puget Sound Regional Fare Coordination System

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### Portable FTP Operations Manual - KT

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ERG Approvals	Author	Process Manager	Manager
Name:	Steve Jackson	Alain Baillard	Rose Fallaw
Signature:			
Date:			



# Contents

<b>1</b>	<b>Introduction.....</b>	<b>5</b>
1.1	Purpose.....	5
1.2	Scope.....	5
1.3	Training Mode.....	5
<b>2</b>	<b>Device Overview.....</b>	<b>7</b>
2.1	Screen Icons and Buttons.....	8
2.2	Screen Layout.....	11
2.3	The Keypad and Button Relationship.....	13
2.4	Entering Text.....	13
2.5	Correcting Text.....	15
2.6	Moving the Cursor Between Fields.....	15
<b>3</b>	<b>Operations.....</b>	<b>17</b>
3.1	Activation.....	17
3.2	View PFTP Owner Information Screen.....	22
3.3	Log In.....	25
3.4	Select Role.....	29
3.5	Start Trip.....	31
3.6	Fare Mode.....	33
3.7	Transactions.....	36
3.7.1	Transaction Type Indicators.....	36
3.7.2	Transaction Examples by Passenger Type.....	37
3.7.3	Transaction Examples by Payment Type.....	37
3.7.4	Transaction Examples with Warnings.....	38
3.7.5	Examples of Invalid Transactions.....	39
3.8	Multiple Passenger Fare.....	40
3.9	Reverse Transaction.....	46
3.10	Passenger Count.....	49
3.11	Inquiry Mode.....	51
3.12	Adjust Volume.....	57
3.13	Lock/Unlock Device.....	58
3.13.1	Locking the PFTP Device.....	58
3.13.2	Unlocking the PFTP Device.....	61
3.14	End Trip.....	62
3.15	End Shift.....	65
<b>4</b>	<b>Maintenance Mode.....</b>	<b>69</b>
4.1	Maintenance Mode Example Screens.....	71
4.1.1	Calibrate.....	71
4.1.2	Forced Connection.....	71
4.1.3	Battery Configuration.....	72
4.1.4	Configuration Data (CD) List.....	73
4.1.5	Audit Registers (AR) List.....	74
4.1.6	Device Configuration.....	75
4.1.7	Audio Control.....	76
4.2	Exit Maintenance Mode.....	77
<b>5</b>	<b>Supervisor Mode.....</b>	<b>79</b>

5.1	Examples of Supervisor Screens.....	81
5.1.1	View Trips.....	81
5.1.2	View Trip Totals.....	82
5.1.3	View Shift Totals.....	82
5.2	Exit Supervisor Mode.....	83
<b>6</b>	<b>Troubleshooting.....</b>	<b>85</b>
<b>7</b>	<b>Error Messages.....</b>	<b>87</b>
<b>Appendix A</b>	<b>Terminology.....</b>	<b>89</b>
A.1	Acronyms and Abbreviations.....	89
A.2	Terms.....	89
<b>Appendix B</b>	<b>Lists of Tables and Figures.....</b>	<b>91</b>
B.1	List of Tables.....	91
B.2	List of Figures.....	91
<b>Appendix C</b>	<b>References.....</b>	<b>94</b>
<b>Appendix D</b>	<b>Document History.....</b>	<b>95</b>



# 1 Introduction

The Portable Fare Transaction Processor (PFTP) for Kitsap Transit (KT) is a portable device that is used in the Central Puget Sound Regional Fare Coordination System (RFCS). The PFTP interacts together with the passengers and the ferry staff to create an Automated Fare Collection (AFC) system. The AFC system allows passengers to pay for their journeys conveniently by using a smart card. The PFTP provides the following functions:

- Operator logon/logoff procedures
- Operator shift and trip functionality
- The following optional business functions:
  - o Auto Fare Payment
  - o Manual Fare Payment
  - o Sales
  - o Inspection
  - o Card Inquiry
- Configuration Data and Usage Data Transfer

Passengers present fare cards to a PFTP in order to travel on all modes of public transport including train, bus, and ferry services. These transactions are passed from the PFTP to a central computer known as the Data Acquisition Computer (DAC) through the wireless data transfer system. This information, referred to as usage data (UD), includes payments for journeys, runs/routes, and shift details that are recorded to the DAC.

The DAC also sends information to the PFTP. This information is referred to as configuration data (CD), and it includes such information as timetables, fares, and device settings.

## 1.1 Purpose

This document provides detailed information for operators in the use of the PFTP hand-held device.

## 1.2 Scope

The scope of this document is limited to instructions relating to the navigation of operator screens on the PFTP and the taking of fares.

## 1.3 Training Mode

Both Operator and Fare Cards can be ordered with the Training Mode bit enabled. Cards set as Training Mode cards can only be used for Training Mode.

When in Training Mode, the following indicator appears to the left of the Battery icon in the upper right corner: (T), as shown in Figure 1.

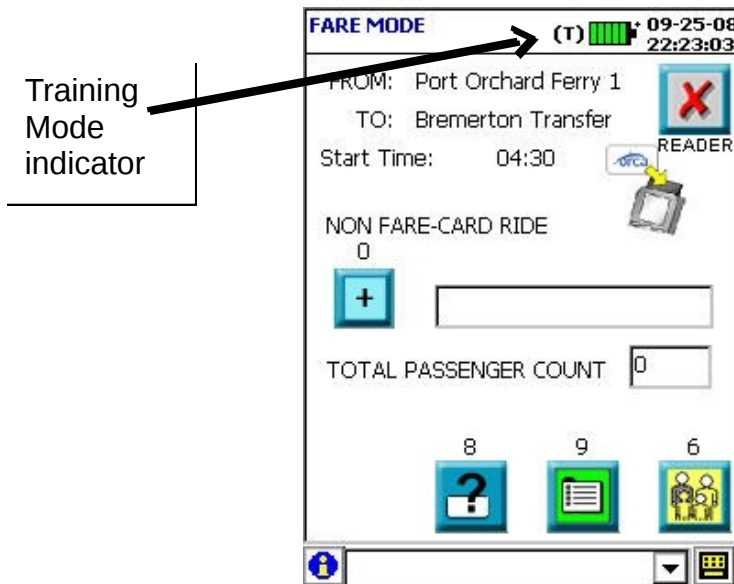


Figure 1: PFTP Training Mode indicator – Fare Mode example

When operating in Training Mode, the PFTP operation is identical to normal revenue operation except as follows:

1. The PFTP remains in Training Mode until the operator logs off.
2. All UD records have the environment set to Training Mode.
3. No Audit Registers are updated.

**Note:** Training Mode transactions follow the same data path as normal transactions (to the DAC, BOC, and Clearinghouse). This enables end-to-end testing (card to Clearinghouse) to be conducted in the revenue system. Note that while training transactions are cleared, they are not included in financial settlement.

For normal operations, the PFTP will reject Training Mode fare cards. In Training Mode, the PFTP will reject normal fare cards (i.e., fare cards that do NOT have the Training bit enabled).

## 2 Device Overview

The PFTP device provides operators with the ability to:

- Accept fares and passes
- Inspect passenger cards
- Provide card details to passengers

The PFTP device has a display screen that shows the details of transactions. There are two ways information can be entered:

- **The Display Screen** — Display screen icons and buttons may be selected using the stylus that is provided with the PFTP. In addition, there is a keyboard icon that displays a QWERTY keyboard on the display screen. The keyboard can be used to enter text by tapping with the stylus.
- **The Keypad** — Icons and buttons on the display screen can be selected by pressing the corresponding hotkeys on the keypad. The Directional Toggle Button can be used change items highlighted for use on the display screen.



Figure 2: Portable Fare Transaction Processor (PFTP)

When using the stylus and the display screen keyboard:

- Do not rest your fingers or hand on the display screen while using the stylus to select keys.
- Do not use anything but the stylus. A pen, pencil, or other pointy object can damage the display screen.
- Press and tap firmly when using the stylus. The display screen is designed for use with the stylus.

The keypad of the PFTP is similar to a cell phone keypad. The keypad has:




















- Alphanumeric keys to enter information, or that can be used as hotkeys to execute functions shown on the display screen

- Directional toggle button that is used to change the selection of the highlighted item on the display screen






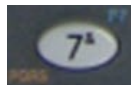



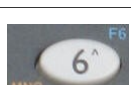
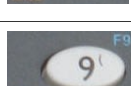


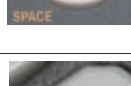







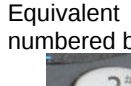
## 2.1 Screen Icons and Buttons























Most icons shown on the display screen have a corresponding hotkey on the PFTP keypad. Table 1 displays icons and their equivalent hotkey buttons. Some icons and hotkey buttons have functions that change between screens.


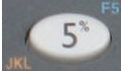

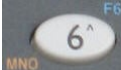









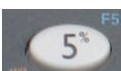
Table 1: Display Screen Icons and Keypad Button Reference Chart

Display Screen icon or action	Description	Equivalent Keypad hotkey	Used
Tap on screen	Backlight on		Used when the display screen goes to 'sleep'
	Back to previous screen		LOG IN screen
	Check icon		INFORMATION screen
	Select Role icon		LOG IN screen
	Options icon		FARE MODE screen
	Card Reader On icon	No equivalent	Shows that the card reader has been activated
	Card Reader Off icon		Shows the card reader is deactivated. Tapping the display screen button or pressing the hotkey activates the card reader.
	Information icon	No equivalent	LOG IN screen
	Escape icon		On some screens, pressing the <b>Enter</b> key will also activate the ESC function
	Tab on screen keyboard		Moves cursor to next text entry field
Clicking in next text entry field using the hand-held stylus	Tab		Moves cursor to next text entry field
	Keyboard icon	No equivalent	Displays/hides the display screen keyboard



Display Screen icon or action	Description	Equivalent Keypad hotkey	Used
	Fare Processor Role		SELECT ROLE screen
	Supervisor Role		SELECT ROLE screen
	Maintenance Role		SELECT ROLE screen
	<a href="#">Vehicle Override</a>		<a href="#">FARE MODE screen</a>
	Inquiry icon		START TRIP screen FARE MODE screen
	Multiple Passenger icon		FARE MODE screen
	Options icon		START TRIP screen FARE MODE screen
	Add/Subtract icon		FARE MODE screen
	Scroll down icon		START TRIP screen
	Scroll down icon		Moves cursor to next text entry field
	Vehicle Override drop-down icon		FARE MODE screen
	Drop-down menu icon		CARD INQUIRY screen
	Numbered destination icon	Equivalent numbered button  i.e.	MULTIPLE PSNGR screen
	Field Inquiry icon	Equivalent numbered button  i.e.	CARD INQUIRY screen

Display Screen icon or action	Description	Equivalent Keypad hotkey	Used
 (typical)	Numeric destination icon	Equivalent numbered button i.e. 	MULTIPLE PSNGR screen
Select from drop-down menu using stylus	Select from drop-down menu		CARD INQUIRY screen
	Lock icon		TRIP OPTIONS screen (SHIFT OPTIONS screen)
	End Trip icon		TRIP OPTIONS screen
	Audio icon		TRIP OPTIONS screen (SHIFT OPTIONS screen)
	Reverse Transaction icon		TRIP OPTIONS screen
	Data Connection icon		TRIP OPTIONS screen
	List Trips icon		SUPERVISOR screen
	Trips Totals icon		SUPERVISOR screen
	Shift Totals icon		SUPERVISOR screen
	Calibrate icon		MAINTENANCE screen
	Connect icon		MAINTENANCE screen
	Battery icon		MAINTENANCE screen
	CD List icon		MAINTENANCE screen

Display Screen icon or action	Description	Equivalent Keypad hotkey	Used
	AR List icon		MAINTENANCE screen
	Configure icon		MAINTENANCE screen
	Audio icon		MAINTENANCE screen
	Lock icon		SHIFT OPTIONS screen (TRIP OPTIONS screen)
	End Shift icon		SHIFT OPTIONS screen
	Audio icon		SHIFT OPTIONS screen (TRIP OPTIONS screen)
	Data Connection icon		SHIFT OPTIONS screen

## 2.2 Screen Layout

shows the various ways information appears on the display screen.

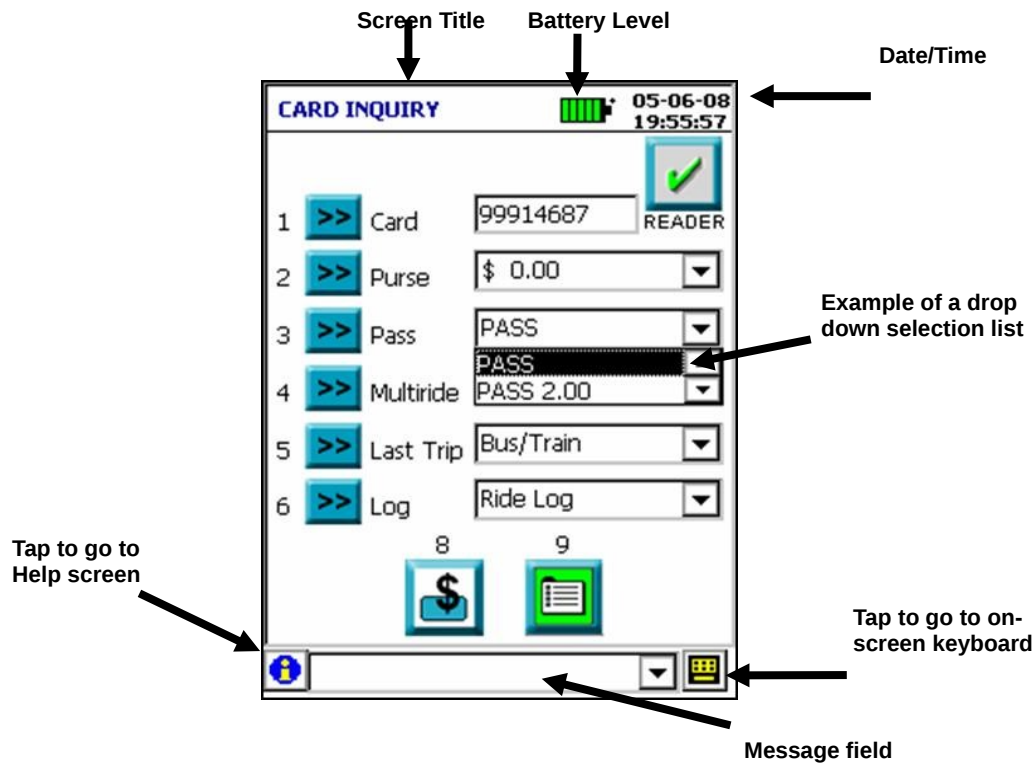


Figure 3: Example Display Screen

The display includes:

- **Indicators** – The top bar of the display screen shows information about the screen title, the battery status, the date, and the time.
- **Display Screen Text information** – During different actions, information will be provided to assist the user.
- **Display Screen Buttons** – Buttons have a beveled edge and can be tapped with the stylus to carry out specific actions.
- **Icons** – A small picture or symbol used to represent an item or to go to another screen. Icons will appear within the display window to operate in much the same way as display screen buttons.
- **Drop-down Lists** – A fixed list of options or functionalities from which the user can choose. The drop-down menu can be fully accessed by clicking on the down arrow button to the right of a selection box: Sometimes an option in such a list activates a new menu (for example, the sorting option). Select the required item by tapping it.

## 2.3 The Keypad and Button Relationship

Figure 4 shows an example of how icons and buttons on the display screen correspond to hotkeys located on the keypad.

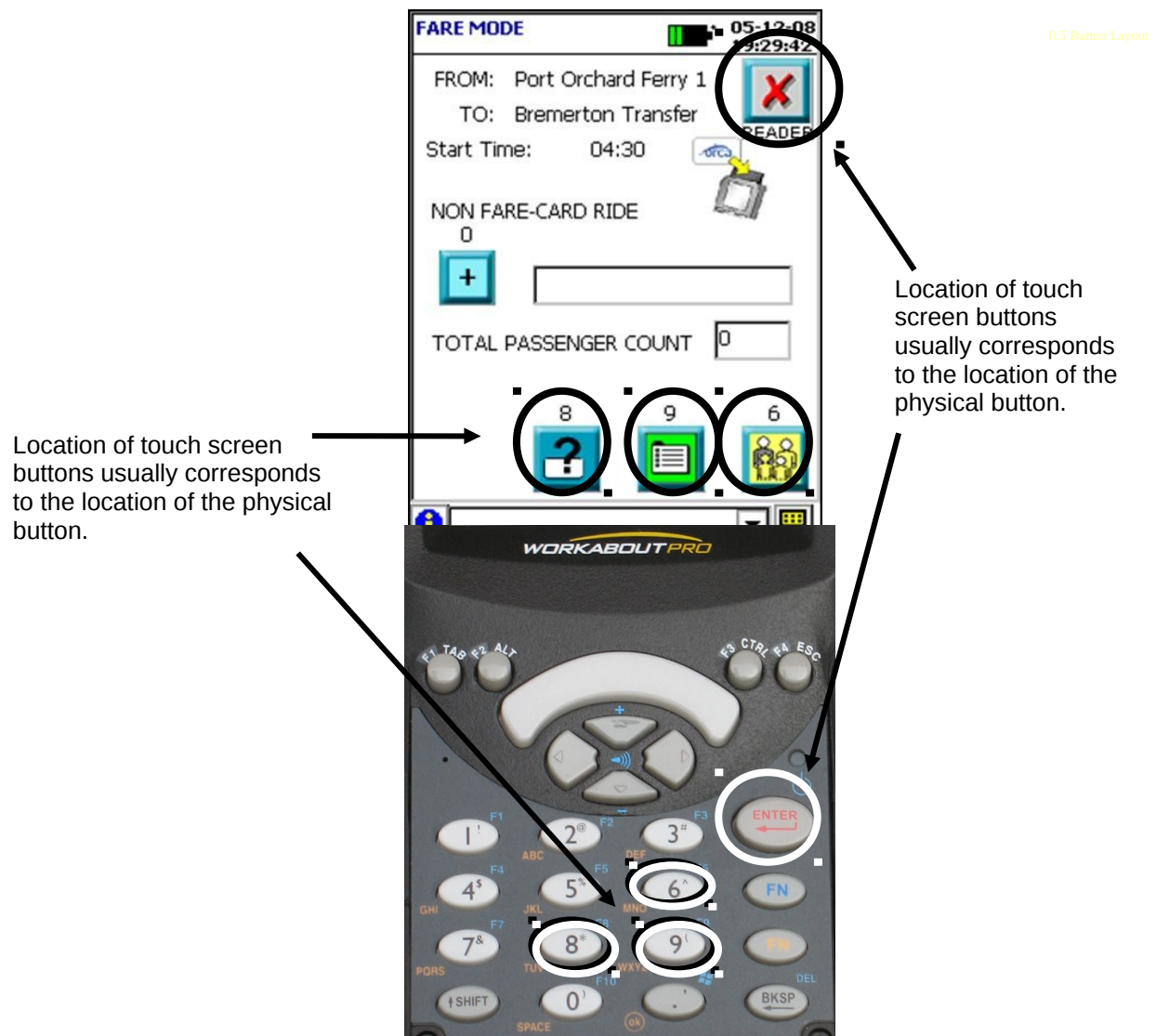


Figure 4: Keypad and Button Relationship

## 2.4 Entering Text

To enter text into the PFTP, you can use keys on the physical keypad, or you can use the stylus to tap the keys on the display screen keyboard. In order for some characters to be used on the physical keypad, **Orange FN** key or the **SHIFT** key must be pressed to access that corresponding set of characters.

The bottom right corner of the screen displays a keyboard icon, which can be tapped to display or hide the on-screen keyboard.



Figure 5: Screen Keyboard Icon

The display screen keyboard is based on the characters available on a standard QWERTY keyboard. Due to limitations on screen space, the keyboard is presented in several views, with each view displaying a subset of the available characters.

The default view shows lower case characters, digits, and punctuation. The large button on the bottom row inserts a space character.

1	2	3	4	5	6	7	8	9	0	-	=	⬅
Tab	q	w	e	r	t	y	u	i	o	p	[	]
CAP	a	s	d	f	g	h	j	k	l	;	'	
Shift	z	x	c	v	b	n	m	,	.	/	↵	
Ctl	áü	`	\						↓	↑	←	→

Figure 6: Keyboard display – Lower Case

Tapping the **CAP** key displays the upper case characters and a second set of punctuation characters. Tapping the **CAP** key again reverts to the default view.

!	@	#	\$	%	^	&	*	(	)	_	+	Del
Tab	Q	W	E	R	T	Y	U	I	O	P	{	}
CAP	A	S	D	F	G	H	J	K	L	:	"	
Shift	Z	X	C	V	B	N	M	<	>	?	↵	
Ctl	áü	~							↓	↑	←	→

Figure 7: Keyboard display – Upper Case

Tapping the **Shift** key when the **CAP** view is active temporarily converts the keyboard to have one character be upper case followed by lower case.

1	2	3	4	5	6	7	8	9	0	-	=	⬅
Tab	q	w	e	r	t	y	u	i	o	p	[	]
CAP	a	s	d	f	g	h	j	k	l	;	'	
Shift	z	x	c	v	b	n	m	,	.	/	↵	
Ctl	áü	`	\						↓	↑	←	→

Figure 8: Keyboard display – One Upper/Rest Lower case

Tapping the **áü** key displays a set of lower case special characters.

¿	í	¢	€	£	¥	§	¶	±	°	«	»	⬅
Tab	à	á	â	ã	ä	å	æ	ç	ð	è	é	ê
CAP	ë	ì	í	î	ï	ñ	ø	œ	ò	ó	ô	
Shift	õ	ö	ß	þ	ù	ú	û	ü	ý	µ	↵	
Ctl	áü	®	©						↓	↑	←	→

Figure 9: Keyboard display – Special Characters Lower Case

Tapping the **CAP** key when the **áü** view is active displays the corresponding set of upper case characters, and tapping the **Shift** key when the **áü** view is active temporarily converts the keyboard to have one character be upper case followed by lower case.

¿	¡	¢	€	£	¥	§	¶	±	°	«	»	Del
Tab	À	Á	Â	Ã	Ä	Å	Æ	Ç	Ð	È	É	Ê
CAP	Ë	Ì	Í	Î	Ï	Ñ	Ø	Œ	Ò	Ó	Ô	
Shift	Õ	Ö	ß	Þ	Ù	Ú	Û	Ü	Ý	µ	←	
Ctl	áü	®	©						↓	↑	←	→

Figure 10: Keyboard display – Special Characters Upper Case

## 2.5 Correcting Text

If you need to correct text:

- On the lower case keyboard, use the **Backspace** arrow to delete characters to the left of the cursor.
- On the upper case keyboard, use the **Del** key to delete characters to the right of the cursor.
- On the keypad, use the **BKSP** button to delete characters to the left of the cursor
- On the keypad, use the **Blue FN** button before the **BKSP** button deletes characters to the right of the cursor.

## 2.6 Moving the Cursor Between Fields

Tap the **Tab** key on the keyboard to move the cursor from one field to the next or use a **Directional Arrow** key (see Figure 11).

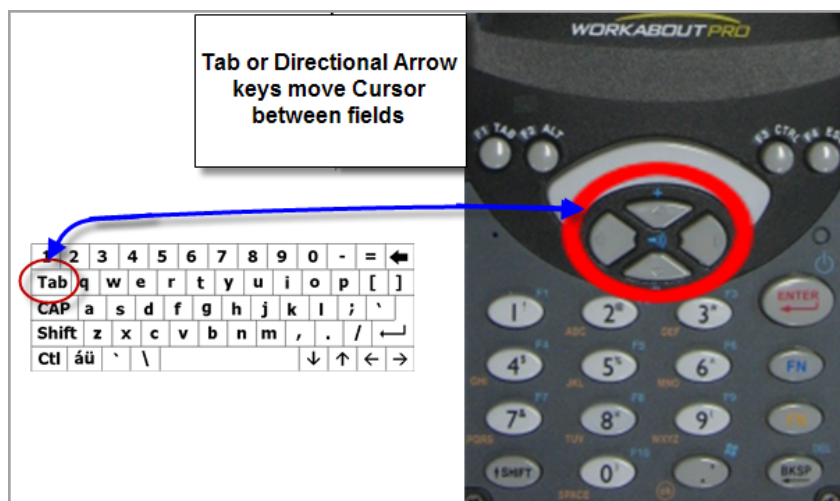


Figure 11: Directional Keys

You can cycle through the fields in the reverse direction by tapping the **Shift** key before each tap of the **Tab** key or using the opposite **Directional Arrow** key.





## 3 Operations

This section describes the method for activation and operation of the PFTP. The following topics are covered:

- Activation of the PFTP (see section 3.1)
- View PFTP Owner Information on the screen (see section 3.2)
- Logging on (see section 3.3)
- Selecting roles (see section 3.4)
- Starting trips (see section 3.5)
- Fare mode (see section 3.6)
- Carrying out transactions (see section 3.7)
- Multiple passenger fares (see section 3.8)
- Reversing transactions (see section 3.9)
- [Passenger Count](#)
- Inquiry mode (see section ~~3.113-10~~)
- Adjusting the device volume (see section 3.12)
- Locking and unlocking the device (see section 3.13)
- Ending trips and shifts (see sections 3.14 and 3.15)

### 3.1 Activation

When the PFTP device first is powered on, the device goes through the process of sending and receiving CD and UD from the DAC to the PFTP. If the PFTP is not correctly configured, the sending and receiving of data will need to take place before PFTP can be used. User action is indicated by the use of numbers.

To start up the PFTP device:

1. Press the **Power** hotkey.



Figure 12: Power hotkey and Power symbol

The **Initializing** screen is displayed while the device starts up.

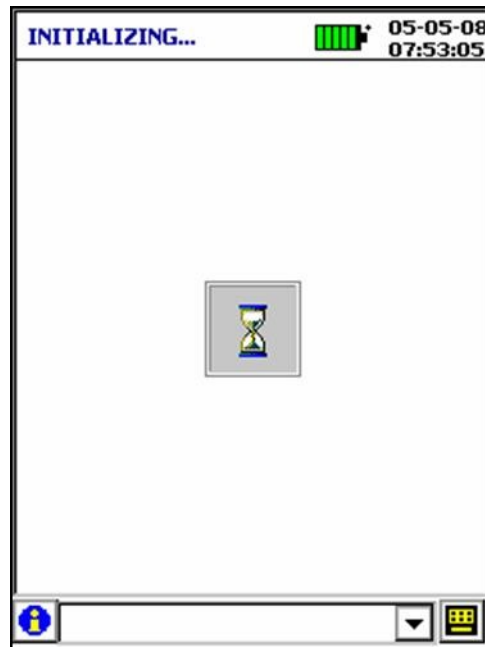


Figure 13: Initializing Screen

The **Connecting to Host** screen is displayed while the device attempts to connect to the DAC.



Figure 14: Connecting to Host screen

The **Host Connection Success** screen is displayed when connection to the DAC is established.



Figure 15: Host Connection Success screen

The latest CD will then automatically download from the DAC to the PFTP, and the latest UD will upload from the PFTP to the DAC.

The **Host Connection Fail** screen is displayed when the attempted connection to the DAC fails. This may happen because the PFTP is out of signal range or because of a problem with the DAC itself. The PFTP will continue the startup sequence to display the user **Log In** screen. The PFTP will continually retry the connection to the DAC, so that data transfer can take place.



Figure 16: Host Connection Fail

The **Data Transfer** screen indicates the transfer progress of data sent and received by the DAC and the PFTP.

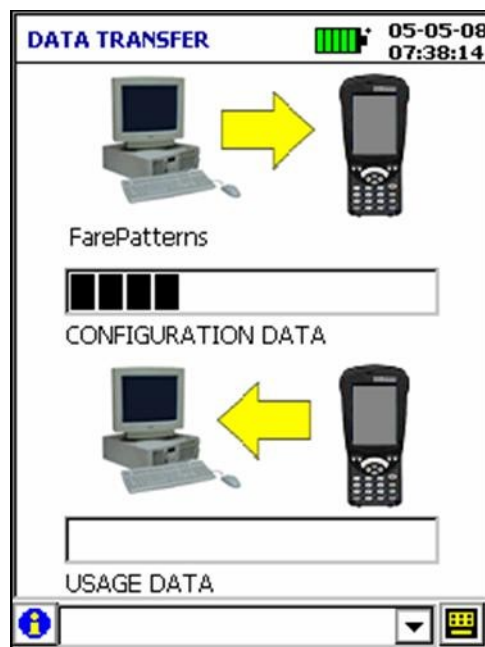


Figure 17: Data Transfer screen

In the event of an RFCS upgrade, the new version of the software application is downloaded with the following message displayed.

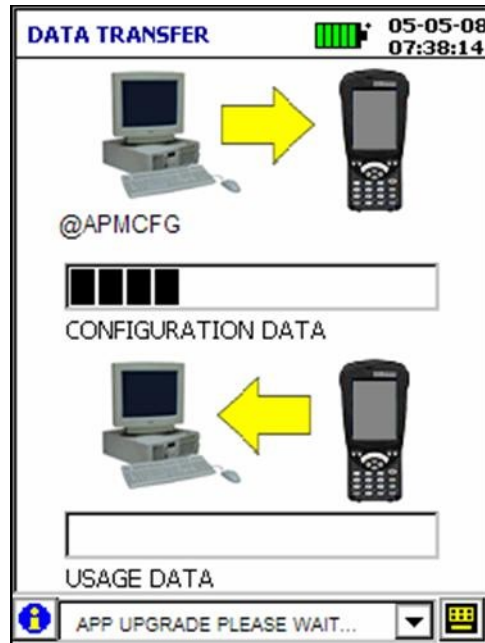


Figure 18: Application Upgrade screen

When the data transfer is complete, the **Log In** screen is displayed.



Figure 19: Log In screen

## 3.2 View PFTP Owner Information Screen

The Information screen provides details about the owner of the PFTP device and contact information if the device is lost or stolen.

To view the **Information** screen:

2. Tap the **Information** icon.

**Note:** There is no hotkey equivalent for the Information icon.

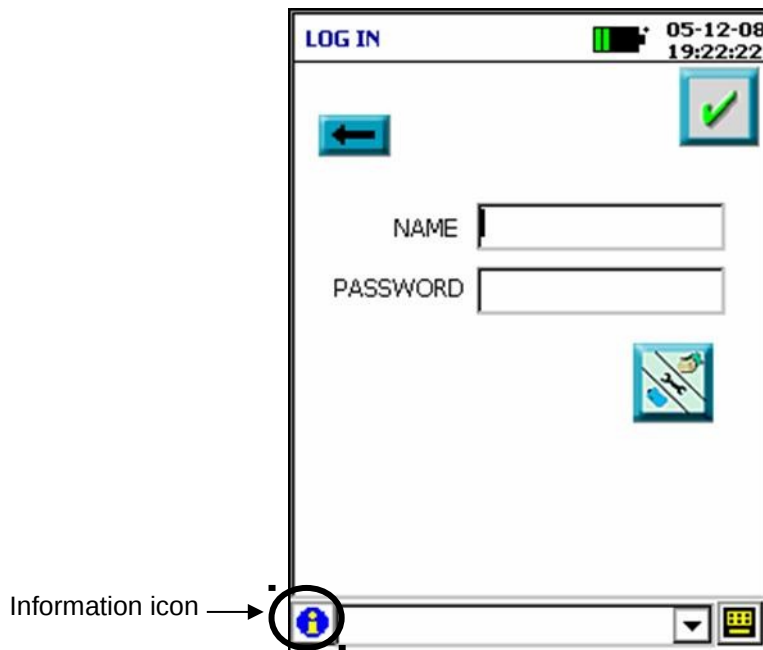


Figure 20: Icon for Owner Information

The information menu will be displayed.

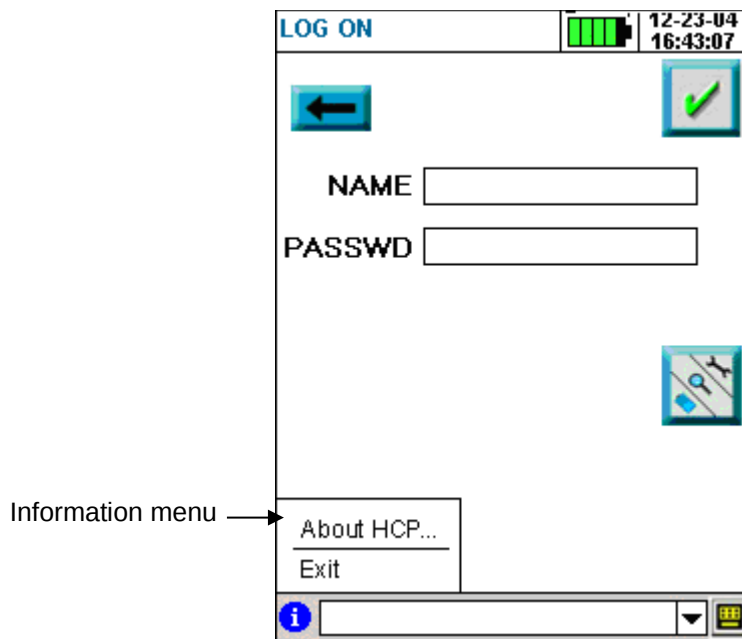


Figure 21: Owner Information menu

3. Click **About HCP...**

This will display the **Information** screen.



Figure 22: Owner Information screen

4. To return to the **Log In** screen, press the **ESC** hotkey or tap the **ESC** icon.  
The **Enter** hotkey can also be used to close the **Information** screen.



Figure 23: Escape from Owner Information screen

The display returns to the previous screen.



## 3.3 Log In

At the start of shift, the PFTP device will need to be powered on, and the user will need to Log In to the device. Once the PFTP has been started up, it will display the **Log In** screen. You can use the buttons found on the keypad or the display screen keyboard.

5. Type your operator name in the **NAME** field.

The screenshot shows a 'LOG IN' screen. At the top, it says 'LOG IN' in blue. To the right of 'LOG IN' is a battery icon and the date/time '05-12-08 19:46:41'. Below this, there are two icons: a blue arrow pointing left and a green checkmark. In the center, there are two input fields. The first is labeled 'NAME' and has a cursor in it. An arrow points from the text 'NAME field' to this field. Below it is a field labeled 'PASSWORD'. At the bottom of the screen, there is an 'Input Panel' which is a virtual keyboard. It has four rows of keys: Row 1: Esc, q, w, e, r, t, y, u, i, o, p, and a right arrow. Row 2: Tab, a, s, d, f, g, h, j, k, l, and an asterisk. Row 3: Shift, z, x, c, v, b, n, m, semicolon/apostrophe, and a left arrow. Row 4: 123, tilde/underscore, Ctrl, at, ampersand, space, comma/underscore, period/slash/question mark, and a right arrow. At the very bottom, there is a status bar with an information icon, a dropdown menu, and a keypad icon.

Figure 24: Login screen - Name

6. Press **TAB** or tap with the stylus (or use directional key) to move to the **PASSWORD** field.

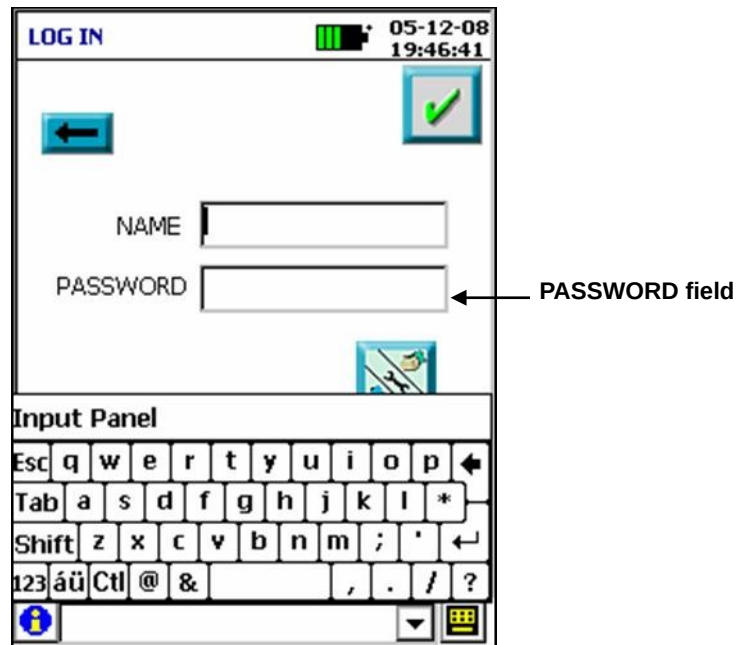


Figure 25: Login screen - Password

**Note:** To "type" using the touch screen, tap the **Keyboard** icon. Tapping the Keyboard icon displays or hides the keyboard.

7. Type your operator password. Your password will be displayed as asterisks (\*).

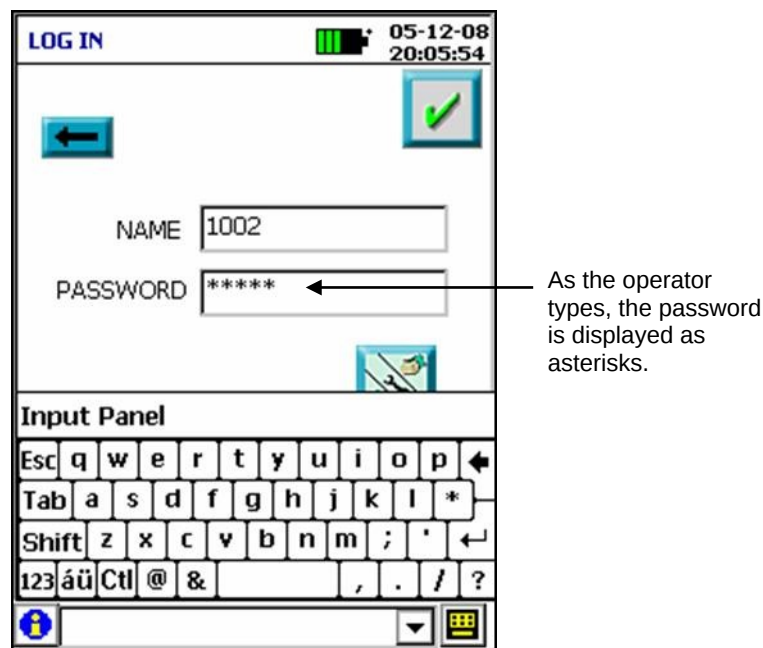


Figure 26: Login screen – Password masked by asterisks

If you need to change the name or password information:

- The on-screen **Back Arrow** button will clear the field.
- The **ESC** key will clear all entries on the screen.

8. When your name and password are correct, press the **Enter** hotkey or tap the **Check** button.

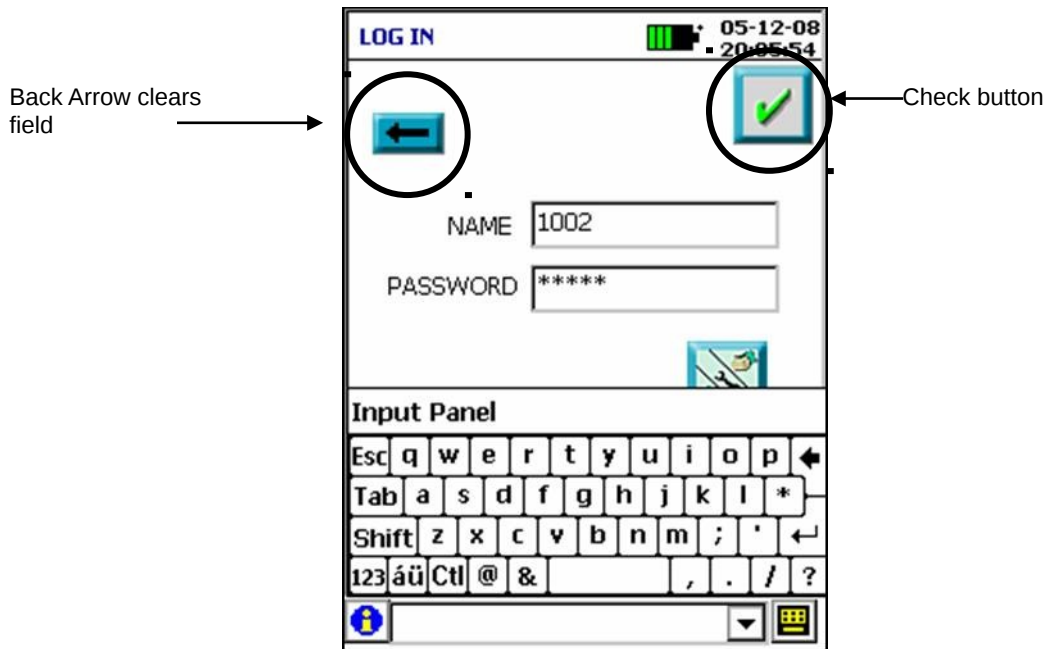


Figure 27: Login screen – Check Button acts as Enter key

The PFTP will compare your name and the password used to the stored logon information. If the name and password do not match, the **Invalid Logon** screen is displayed.

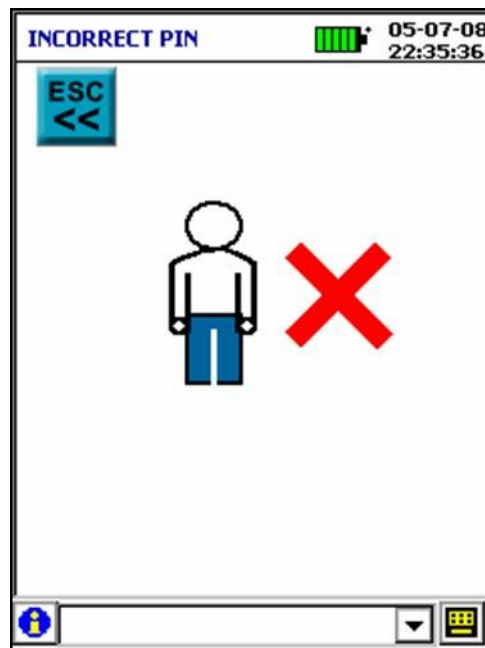


Figure 28: Invalid Login screen

If the **Invalid Logon** screen displays, return to the **Log In** screen by pressing the **ESC** key or by tapping the ESC icon.

**Note:** There is no limit to the number of permitted tries when logging on to the PFTP manually. However, when card logon is configured, the card is blocked after a predefined number of invalid retries.

If the logon is valid, the **Start Trip** screen is displayed with the schedule highlighted.

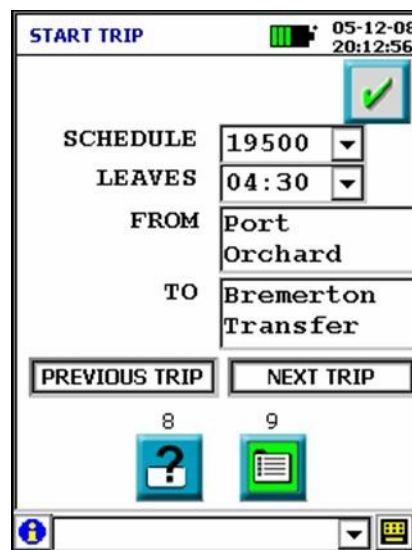


Figure 29: Start Trip screen

## 3.4 Select Role

The user may have one or more roles that can be used with the PFTP device. When you Log In, the user determines whether to Log In in Operator, Supervisor, or Maintenance mode.

9. At the **Log In** screen, enter your name and password

10. Press the **Select Role** hotkey or tap the **Select Role** icon.

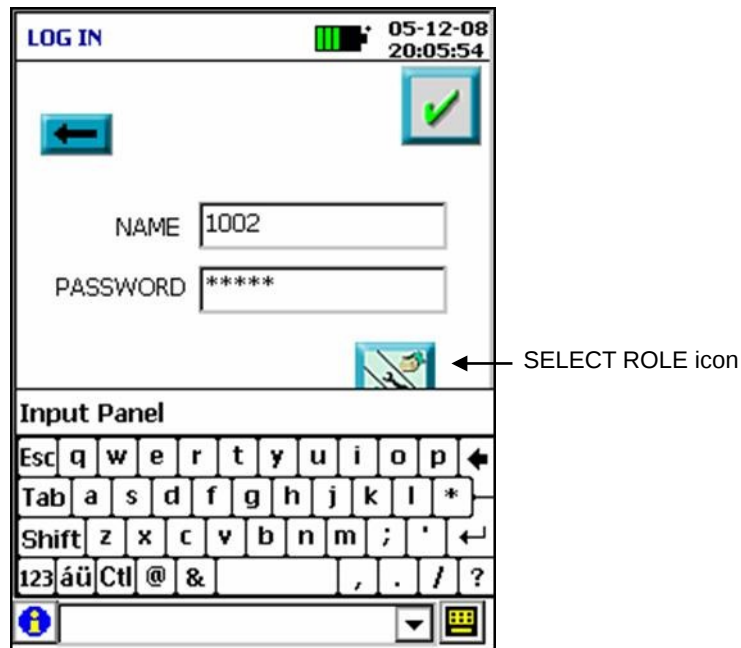


Figure 30: Select Role icon

The **Select Role** screen is displayed.

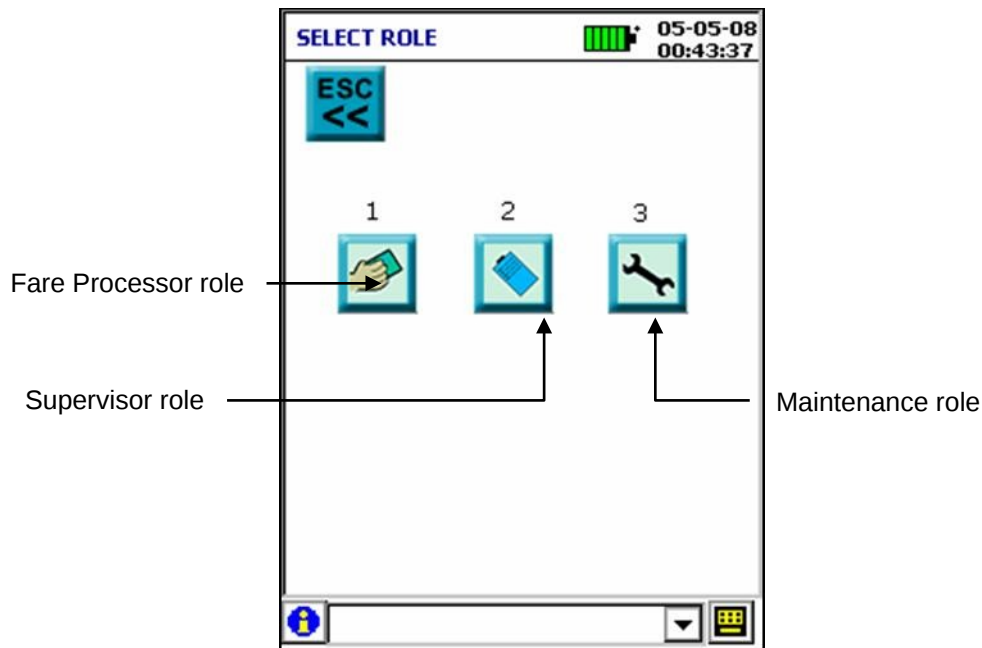


Figure 31: Select Role buttons

11. Press the required role hotkey (**1**, **2** or **3**) or tap the required role icon on the display screen.

If the selected role is not correct for the user, the **Invalid Role** screen will be displayed.

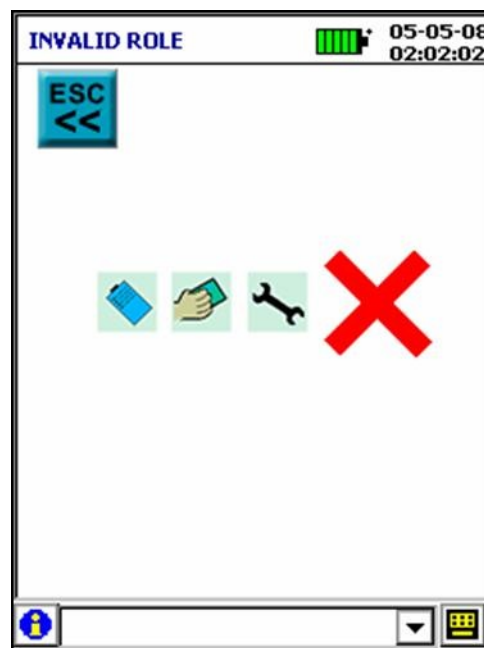


Figure 32: Invalid Role screen

Press the **ESC** hotkey to return to the **Log In** screen.

If the role chosen is valid, the relevant menu will appear on the display screen.

## 3.5 Start Trip

This section looks at the process for starting a trip. A trip is part of a schedule. A schedule is a block of work that includes a series of sailings (i.e., trips). The terminal names for the starting and ending points of the trip are displayed on the **Start Trip** screen.

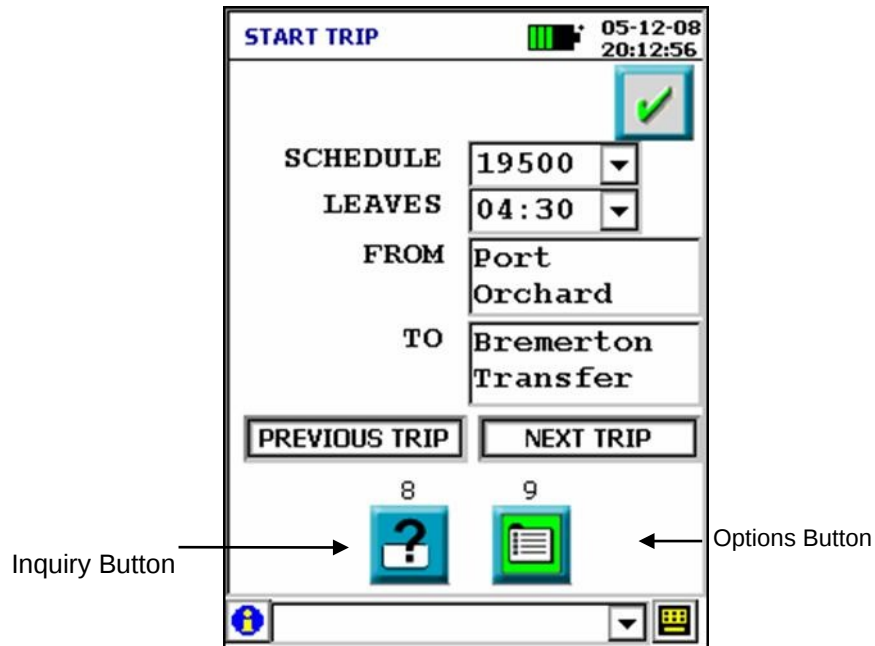


Figure 33: Start Trip screen options

The **Inquiry** button opens the **Fare Inquiry** screen. Press the **8** hotkey or tap the **Inquiry** icon to go to the **Fare Inquiry** screen.

The **Options** button opens the **Trip Options** screen. Press the **9** hotkey or the **Options** icon to go to the **Shift Options** screen.

If the correct terminal is not displayed:

12. Tap the **Next Trip** icon until the correct terminal is displayed.

To start the trip:

13. Confirm all the trip information is correct.

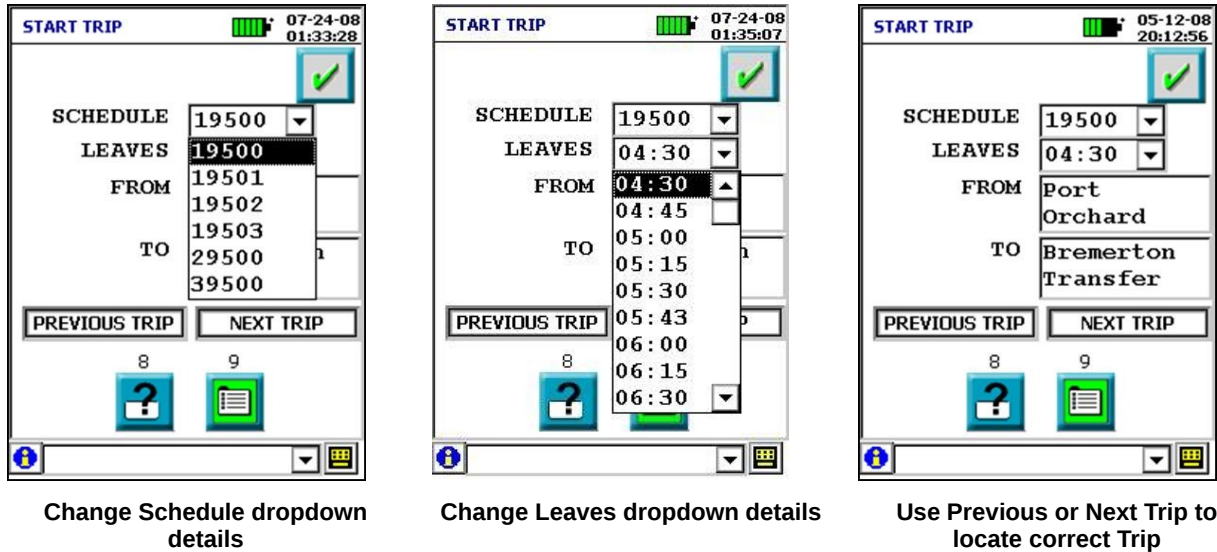


Figure 34: Confirm Trip Information Options

14. Press the **Enter** hotkey to start the trip or tap the **Check** icon.

The **Fare Mode** screen is displayed. The PFTP is ready to process passenger boarding.

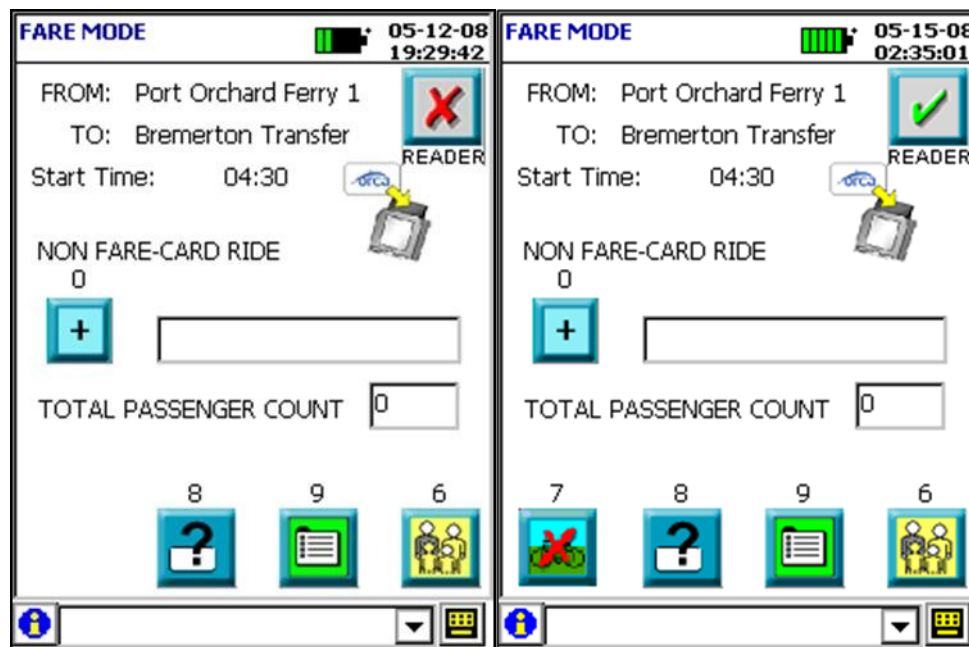


Figure 35: Fare Mode screen



## 3.6 Fare Mode

When the PFTP is in Fare Mode, the information on passenger fare cards can be read by the device. This allows fare cards to be processed and fare inspections to take place. The PFTP has a card reader inside the device.

Fare cards are presented to the back of the device.



Figure 36: PFTP in Fare Mode

If the card reader is switched off, the **Card Reader** icon is crossed out.

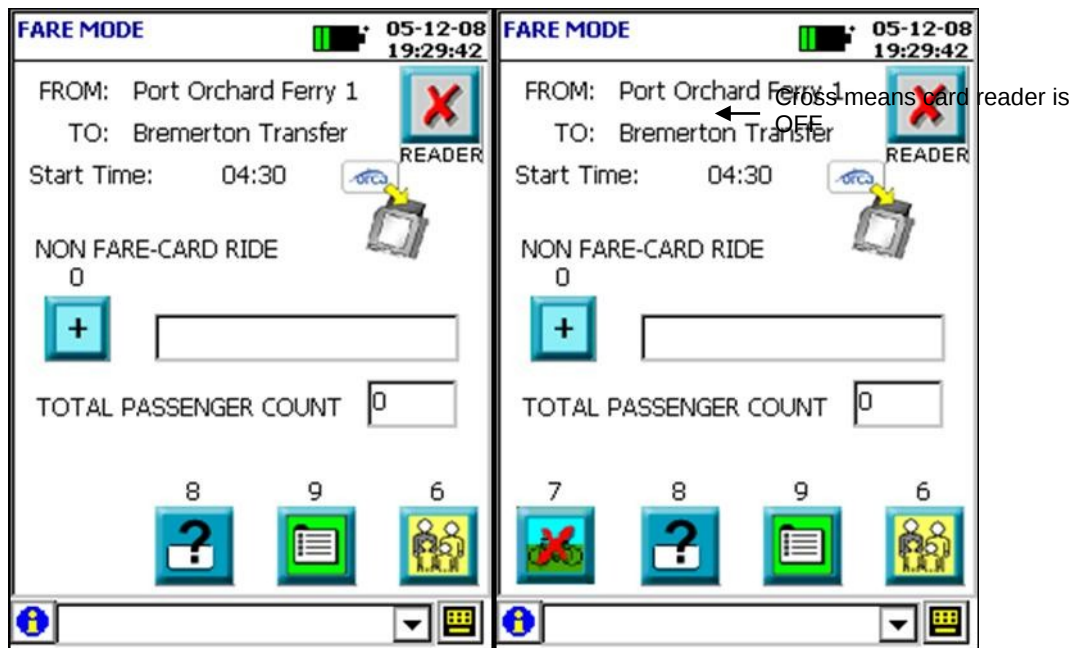


Figure 37: Card Reader Off indicator

The Card Reader will stay active a preconfigured amount of time, after which the PFTP card reader is automatically switched off to conserve battery power.

15. Press the **Enter** hotkey or tap the **Card Reader Off** icon.

16. Present fare card to the card reader.

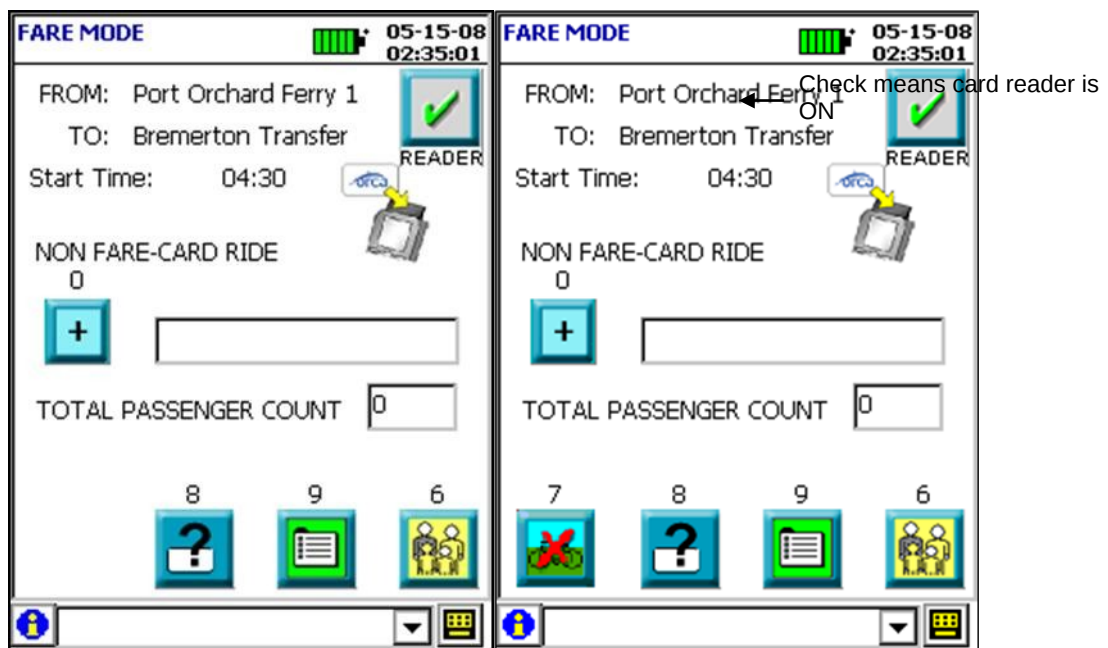


Figure 38: Card Reader On indicator

The transaction status is displayed with corresponding audio.

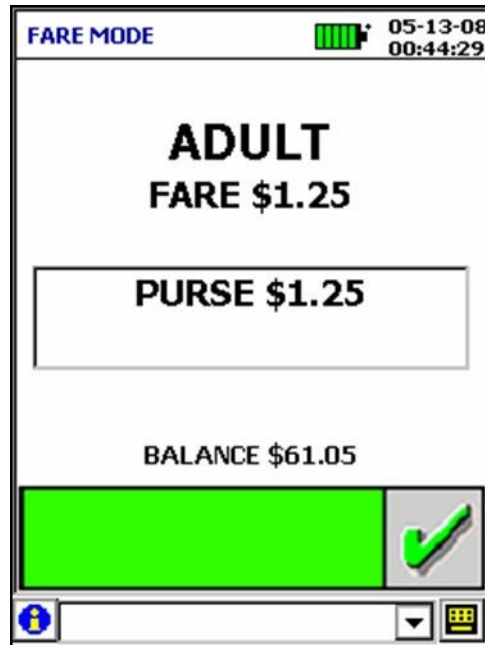


Figure 39: Card Read Result

After a preset timeout, the display returns to **Fare Mode** screen.

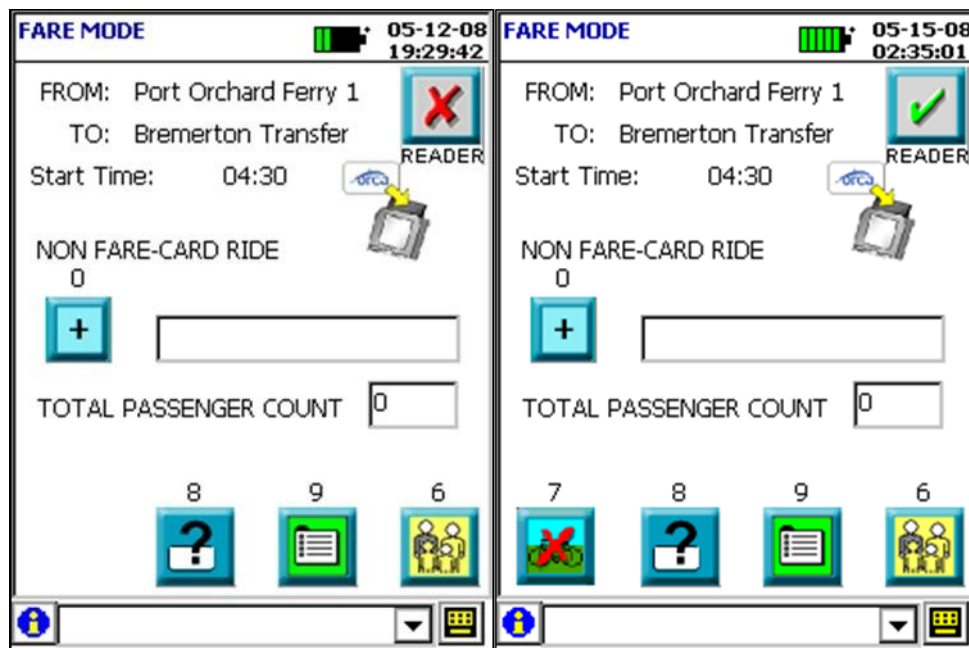


Figure 40: Return to Fare Mode display

17. Present the next fare card to the card reader.

18. Press the relevant destination hotkey or tap the relevant icon to change the destination for the next passenger.

After a preset timeout, the display returns to the **Fare Mode** screen.

## 3.7 Transactions

This section describes Fare Mode display screens that are shown during various transaction processes. Some processes include the system emitting warning beeps as is described with the relevant example screens.

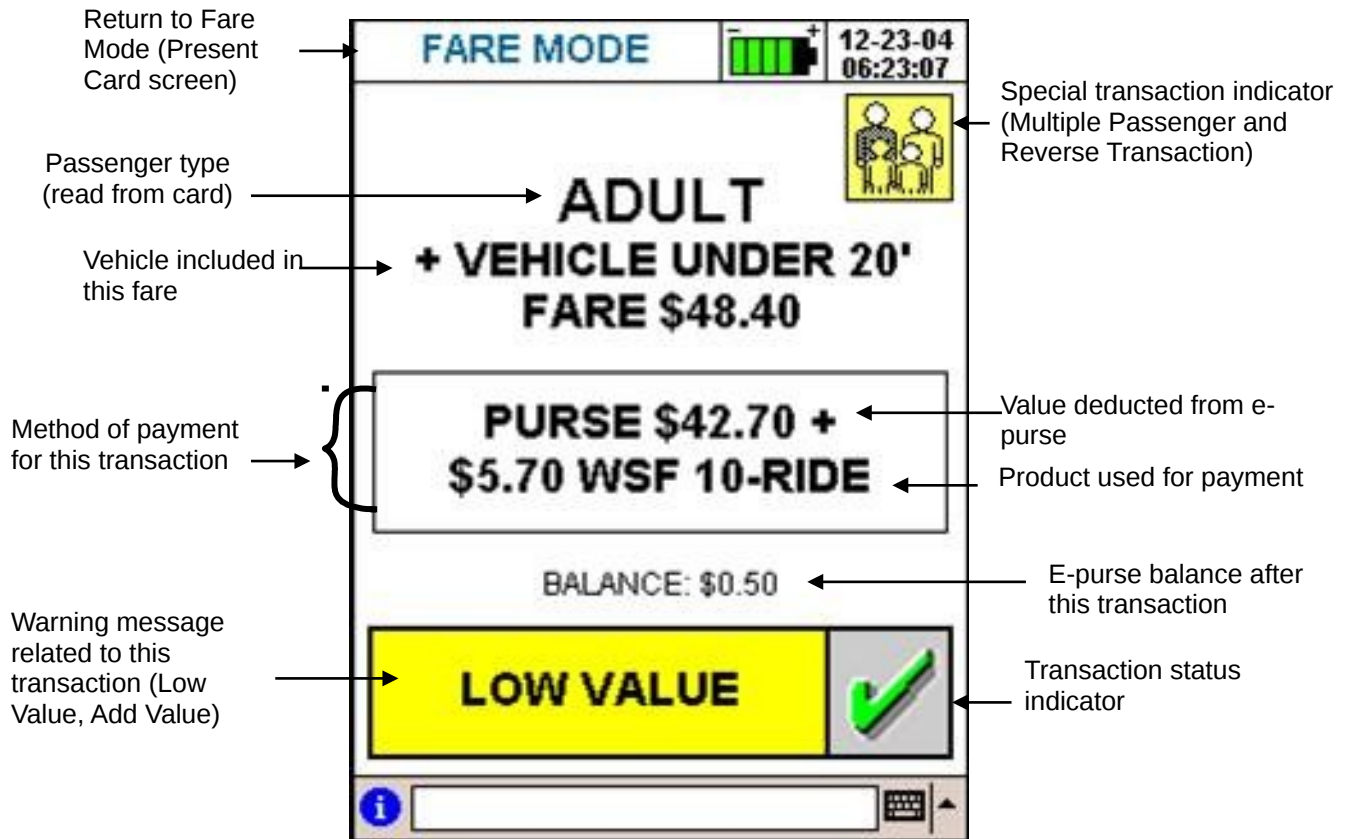


Figure 41: Transaction example

### 3.7.1 Transaction Type Indicators

Different colored displays and a range of different audio beeps are used to indicate specific responses to transactions. Figure 42 shows examples of the responses.

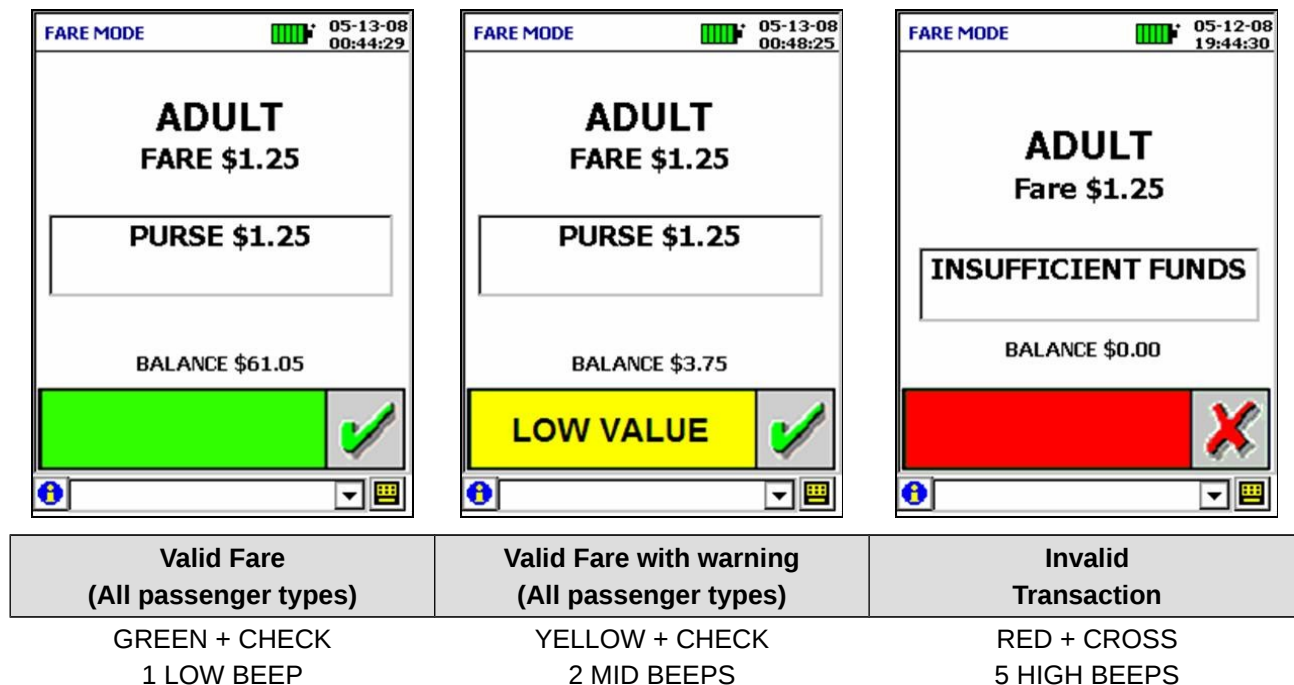


Figure 42: Transaction Type Indicator examples

### 3.7.2 Transaction Examples by Passenger Type

Full Fare Paid transactions include no warnings.

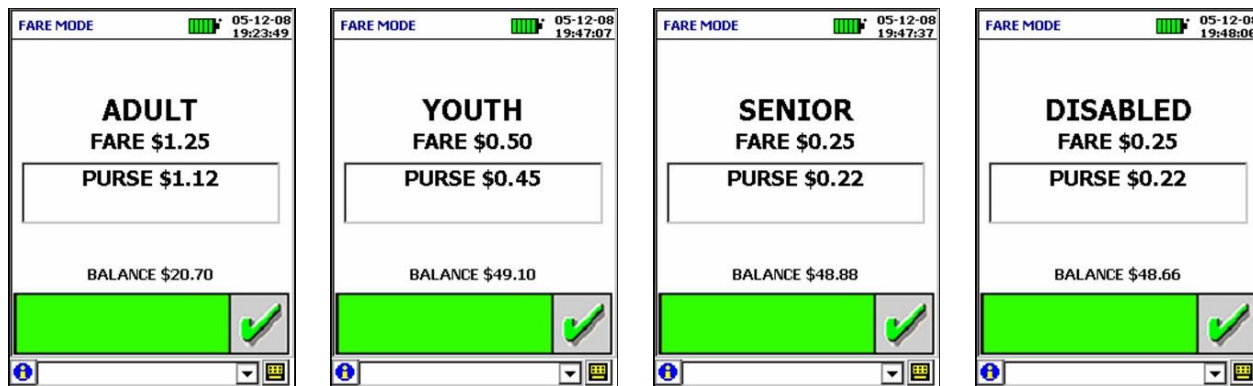


Figure 43: Transaction examples by Passenger Type

### 3.7.3 Transaction Examples by Payment Type

Transactions can be paid in a variety of ways, including e-purse, period pass, multiride product, or a combination.

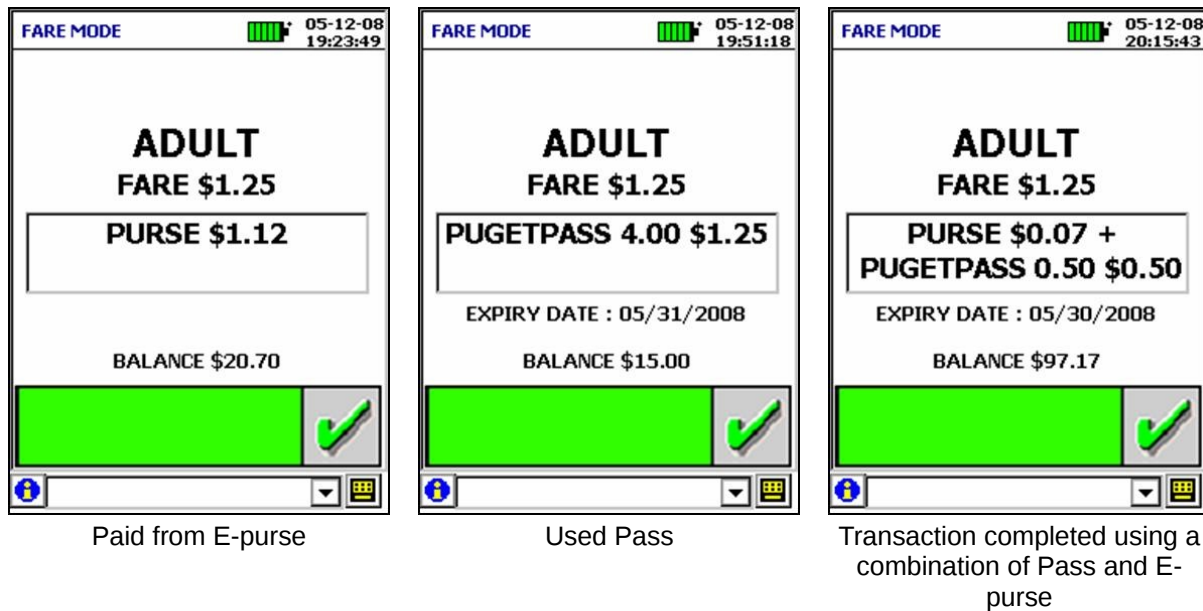


Figure 44: Transaction examples by Payment Type

### 3.7.4 Transaction Examples with Warnings

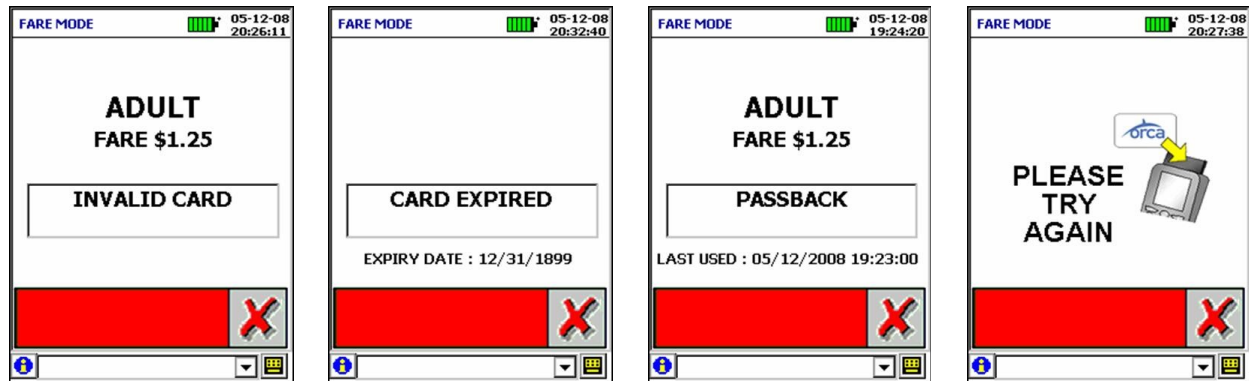
Warnings are provided to passengers to indicate when their cards are running low on available funds or when current passes are due to expire. Warnings also notify when new e-purse value or a new pass is added to a card.



Figure 45: Transaction examples with Warnings

### 3.7.5 Examples of Invalid Transactions

The following screens show examples of invalid transactions.



Invalid for any of the following reasons:

1. No valid pass and e-e-purse = \$0.00.
2. Card marked as lost or stolen. Passenger has to see customer service to get the card unblocked.
3. Not configured as an ORCA Card.

Card expiration date has been reached and a replacement card is required.

A Passback violation occurs when a passenger tries to use their card again at the same PFTP within preset time. NOTE: Use Group fare to pay for multiple passengers with a single card (see section 3.8 Multiple Passenger Fare 40).

Incomplete transaction aborted. Present card again.

Figure 46: Invalid Transaction examples

When the value in the e-purse is insufficient to pay the fare, the remaining value in the e-purse will be deducted and an invalid transaction message indicates the amount due in cash to cover the short-fall. The operator must press **Enter** or tap the **Continue** icon to clear the message and continue processing passenger cards.

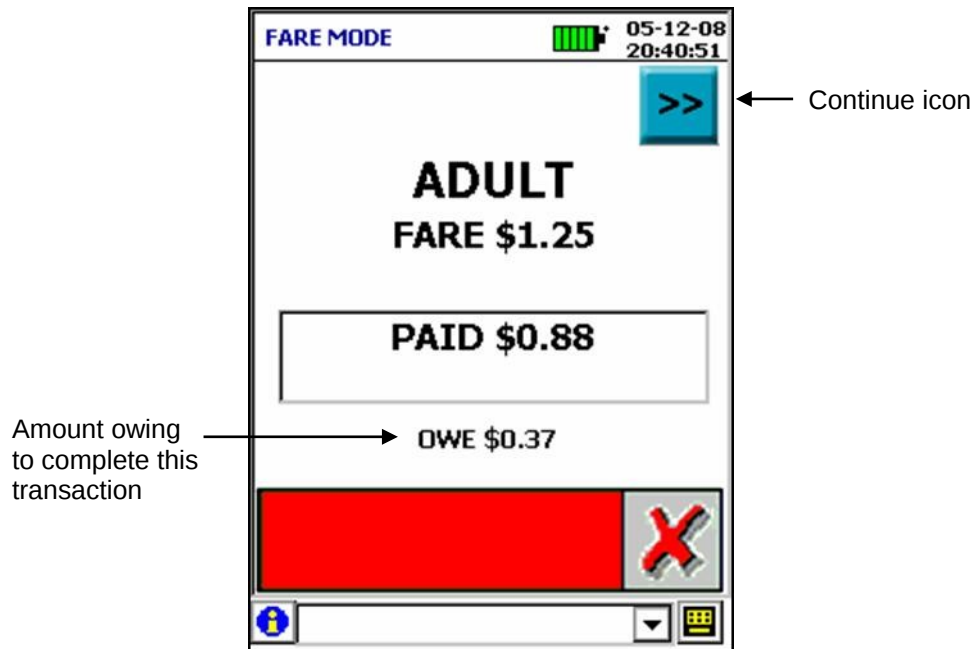


Figure 47: Amount Owed to Complete Transaction example

Subject to Agency policy, the operator may request that the passenger pay the shortfall in cash.

### 3.8 Multiple Passenger Fare

This feature of the PFTP allows a group of passengers to pay through one transaction. The multiple fares can be paid using any combination of cash, e-purse, or pass that is valid on the fare card.

While in Fare Mode:



19. Press the **6** hotkey (or tap the **Multiple PSGR** icon).

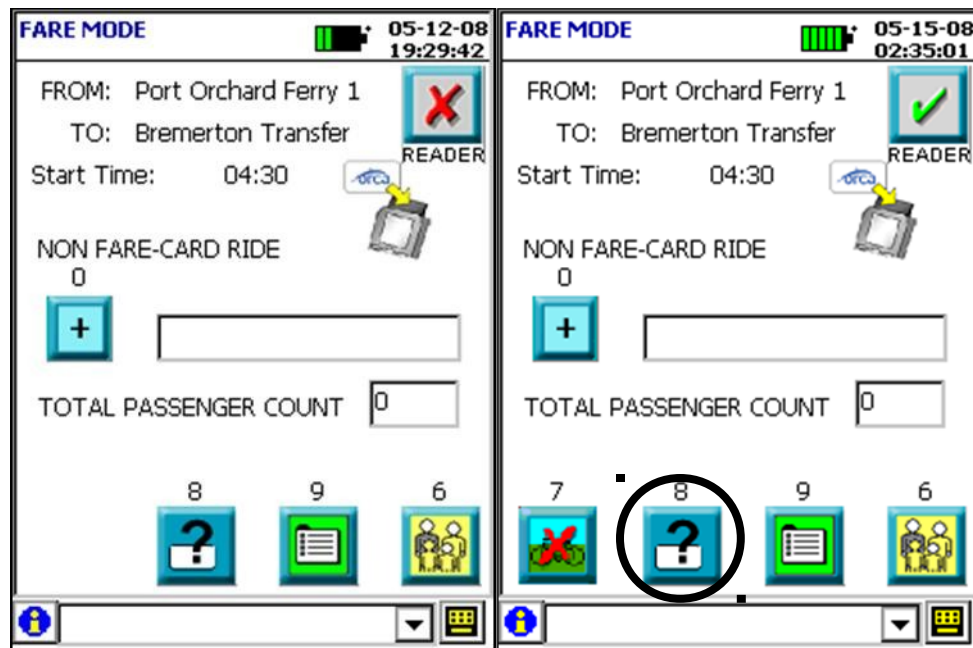


Figure 48: Fare Mode screen – Multiple Fare button

The **Multiple PSGR** screen is displayed with Adult field selected.

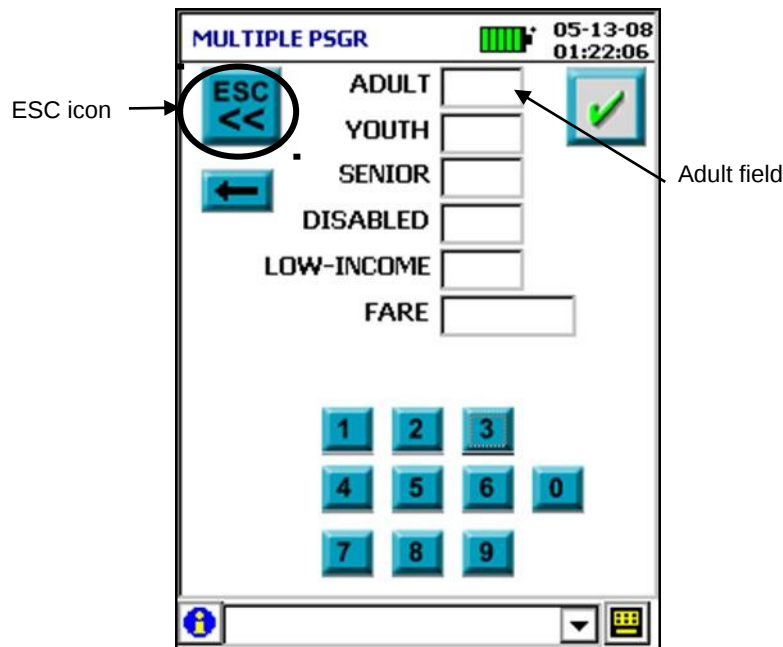


Figure 49: Multiple Passenger screen

To cancel the Multiple Passenger operation, press the **ESC** hotkey or tap the **ESC** icon.

The display will return to the **Fare Mode** screen ready for a new transaction.

20. Enter the number of adults by using the hotkeys or tap the numbers on the display screen.

The **Fare** field in the following example shows the total amount of the group fare.

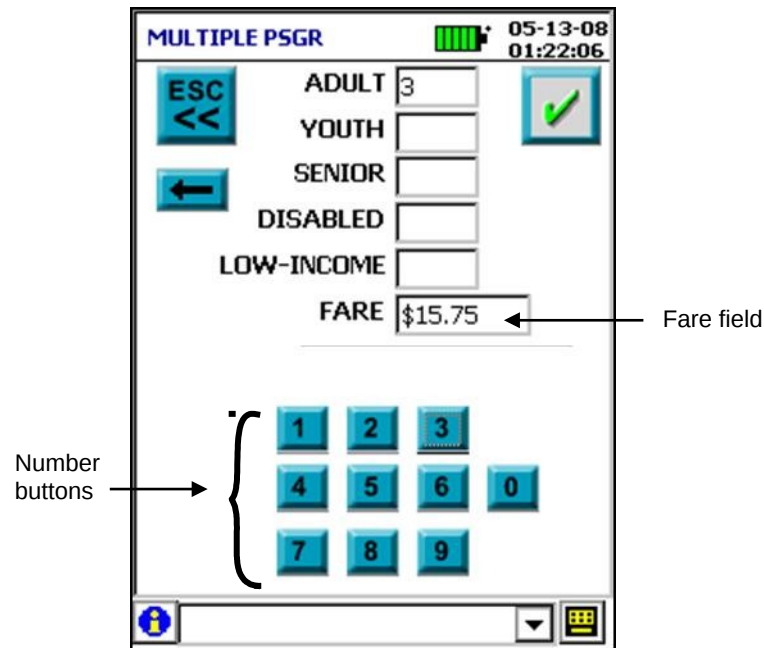


Figure 50: Multiple Passenger Fare example

21. If required, press the Directional Toggle down button or the Tab hotkey to select the next passenger description field or use the stylus to tap inside the required field.
22. Repeat the process until all passenger descriptions in the group fare transaction equal the number of people to be included in the group.

The following example shows data for several of the passenger types, as part of a multiple passenger transaction.

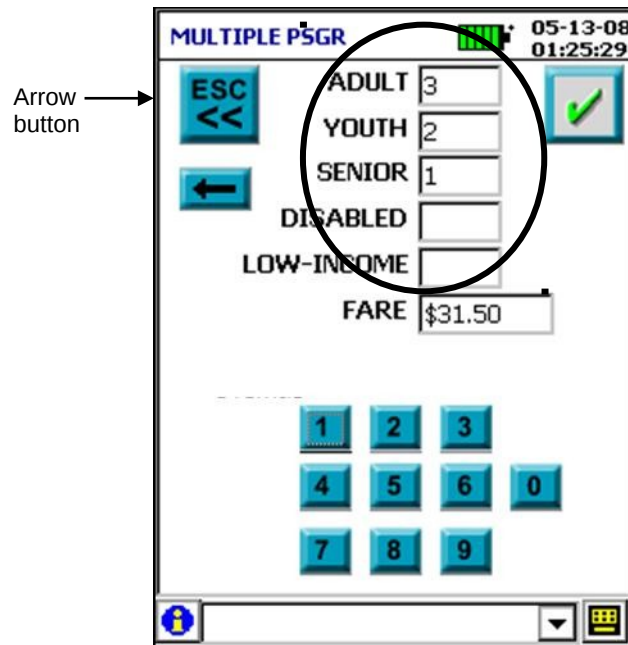


Figure 51: Clear Entries on Multiple Passenger screen

If the values are incorrect, press the **BKSP** hotkey or tap the **Arrow** button.

The passenger type fields are cleared and **Fare** field reset to \$0.00.

23. Once the values are correct, press the **Enter** hotkey or tap the **Check** button.

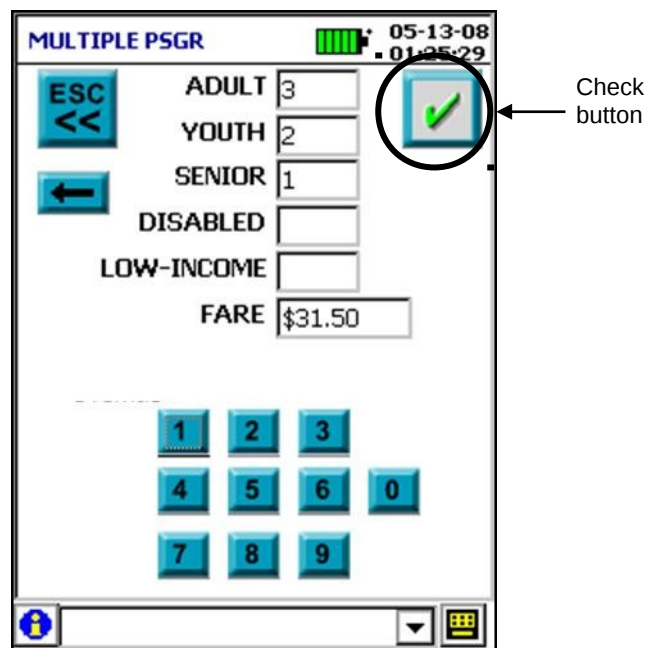


Figure 52: Check button to accept or use Enter key

The **Multiple PSGR Present Card** screen is displayed.

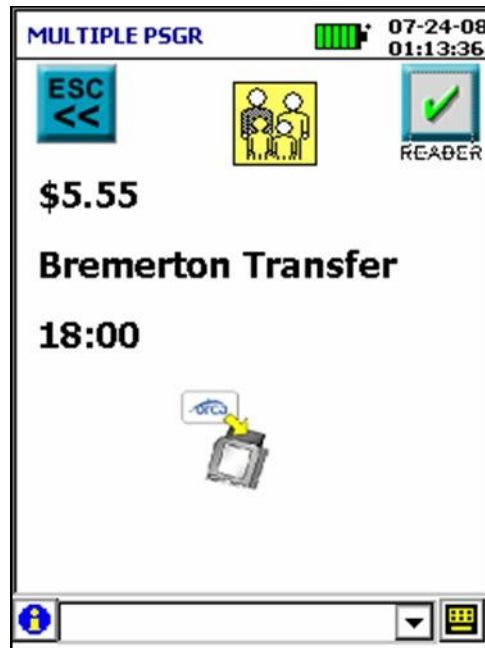
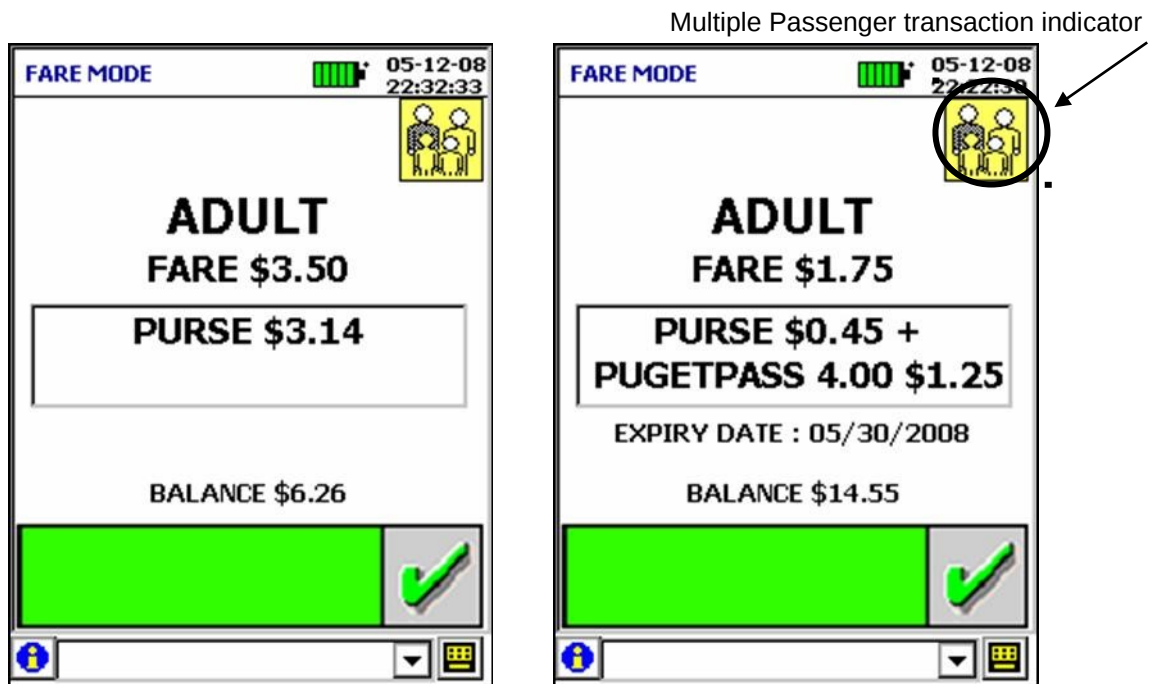


Figure 53: Multiple Passenger Fare displayed

If the Cross button is showing, the Card Reader has automatically turned off.

24. Press either the **Enter** hotkey or tap the **Card Reader Off** button to turn on the Card Reader.
25. Present the fare card to the Card Reader.

The following displays show examples of multiple passenger transactions:



In this example, the entire fare has been paid from the e-purse.

In this example, the cardholder's fare has been covered by a pass and the rest of the fares have been paid from the e-purse. This is done automatically through the PFTP.

Figure 54: Multiple Passenger Fare Transaction example

After a preset timeout, the display will return to **Fare Mode** and is then ready for the next transaction.

## 3.9 Reverse Transaction

Reverse Transaction means to undo a sale. This occurs when, for example, passengers change their minds after the transaction has been completed.

Transactions can be reversed only on the most recent sale and within a preset time period following the transaction. In addition, it must be performed on the same PFTP and during the operator shift in which the original transaction took place.

While in **Fare Mode**:

26. Press the **9** hotkey or tap the **Options** button.

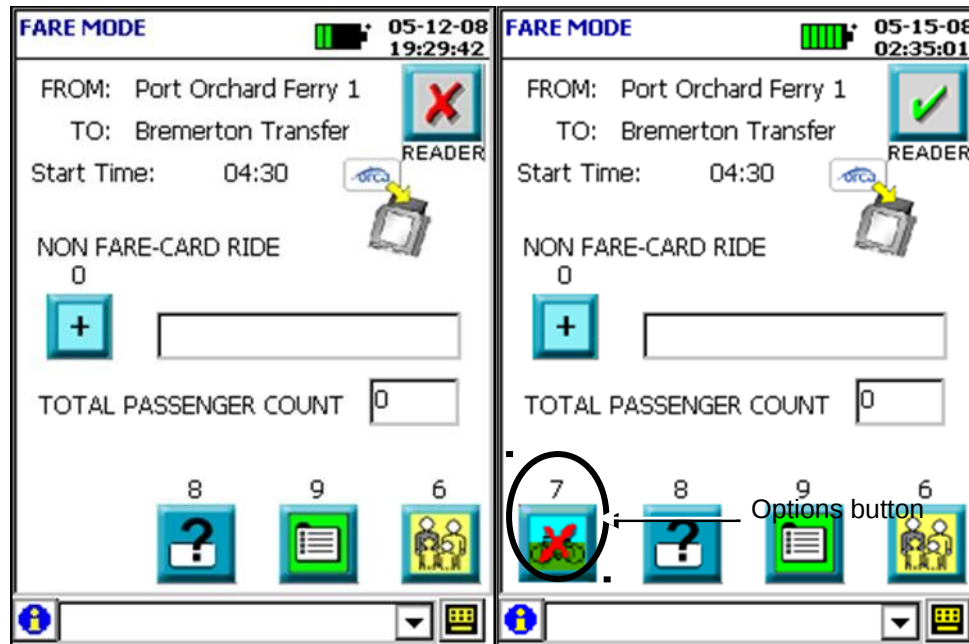


Figure 55: Options button on Fare screen

The **Trip Options** screen is displayed:

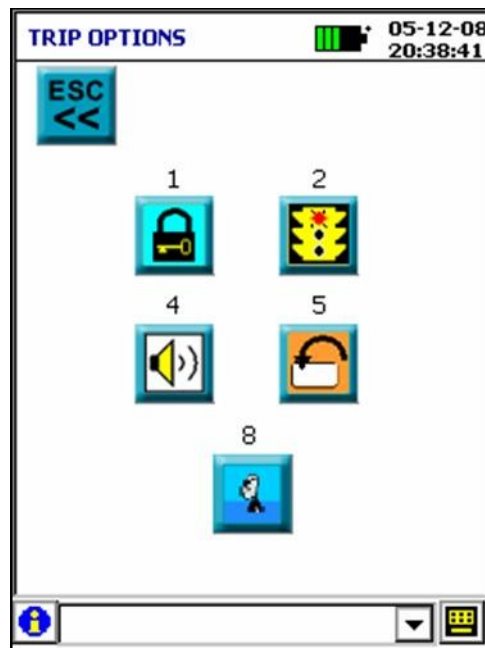


Figure 56: Options screen Buttons

To cancel from the **Trip Options** screen, press the **ESC** key (or tap the **ESC** icon).  
The display will return to the **Fare Mode** screen.

27. Press the **5** hotkey (or tap **Reverse Transaction** button).

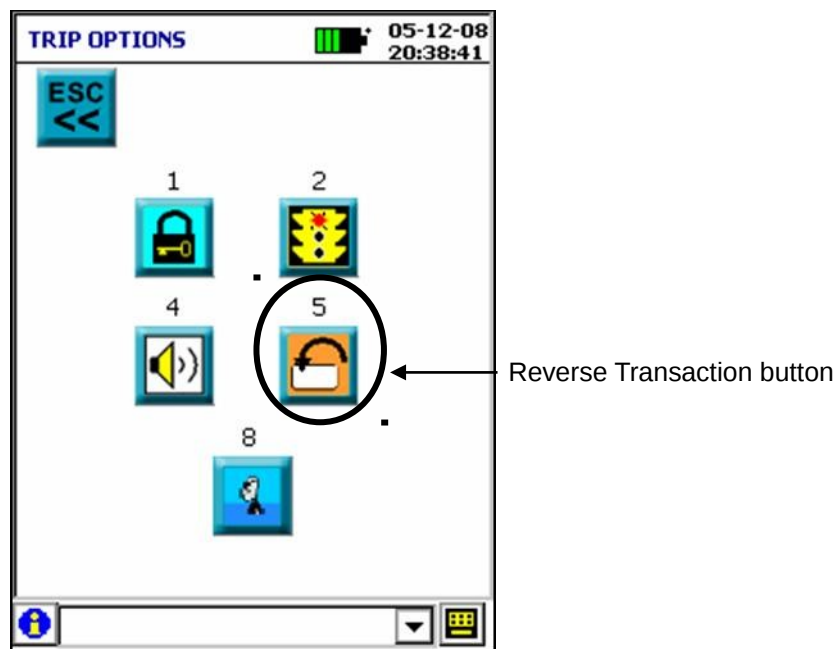


Figure 57: Options screen – Reverse Transaction button

The display on the **Reverse** screen shows the Reverse Transaction message.

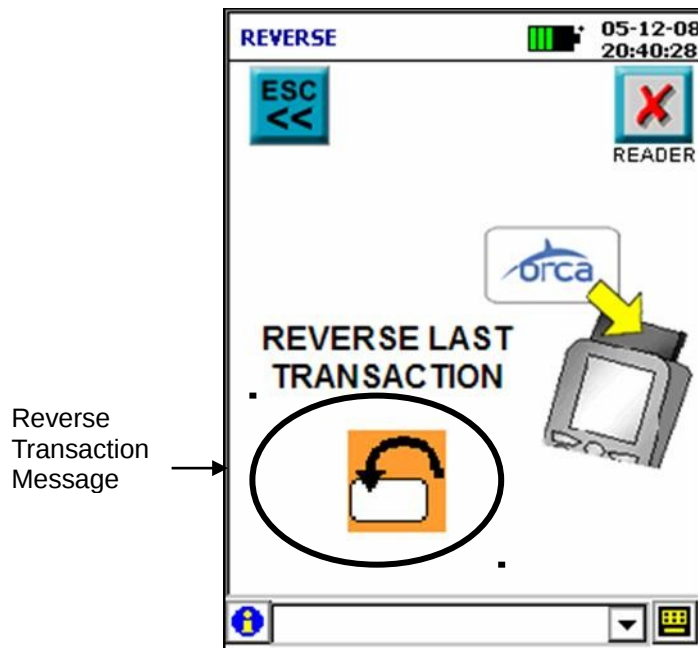


Figure 58: Reverse Transaction message



In this example, a transaction that deducted \$1.12 from the e-purse has been reversed.

In this example, a transaction that deducted one ride from a 10-ride product has been reversed.

Figure 59: Reverse Transaction examples

To cancel the reverse transaction operation, press the **ESC** hotkey or tap the **ESC** icon.

Display will return to the normal **Fare Mode** screen ready for the next transaction.



Press **Enter** hotkey or tap the **Card Reader Off** button to turn on the Card Reader.  
28. Display returns to the **Fare Mode** screen, ready for the next transaction.

### 3.10 Passenger Count

29. At the Fare Mode screen, fare-card passengers are automatically added to the **Total Passenger Count**.

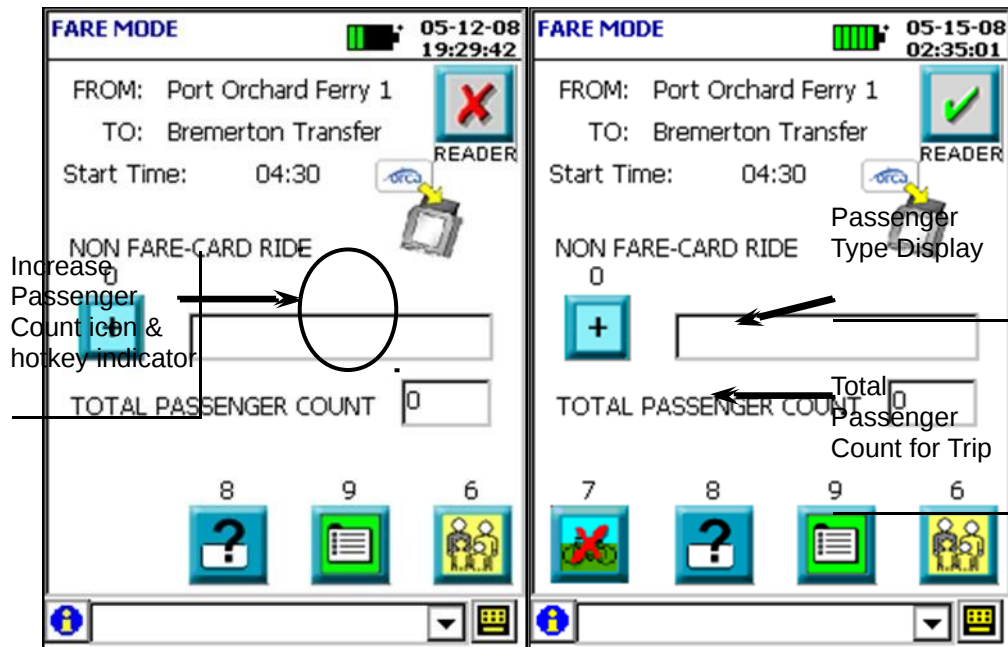


Figure 60: Passenger Count Increase icon

30. To track passengers who do not use fare cards, set the Increase/Reduce Passenger Count icon to the correct display by clicking on the icon or using the 0 (zero) key to toggle from add (+) to subtract (-): use Increase (+) Passenger Count icon to add Passengers to the **Total Passenger Count** or use Reduce (-) Passenger Count icon to subtract Passengers from the **Total Passenger Count**.

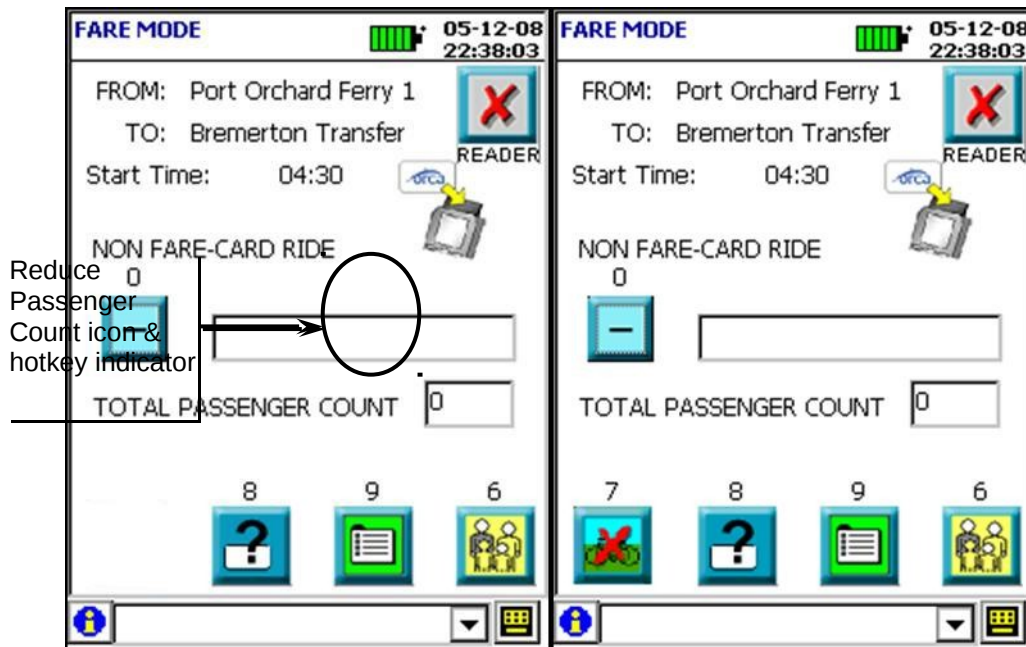


Figure 61: Passenger Count Reduce icon

31. Press the equivalent Keypad hotkey to add a specific **Passenger Type**. See Table 2 for a list of the available Passenger Types and equivalent hotkeys.

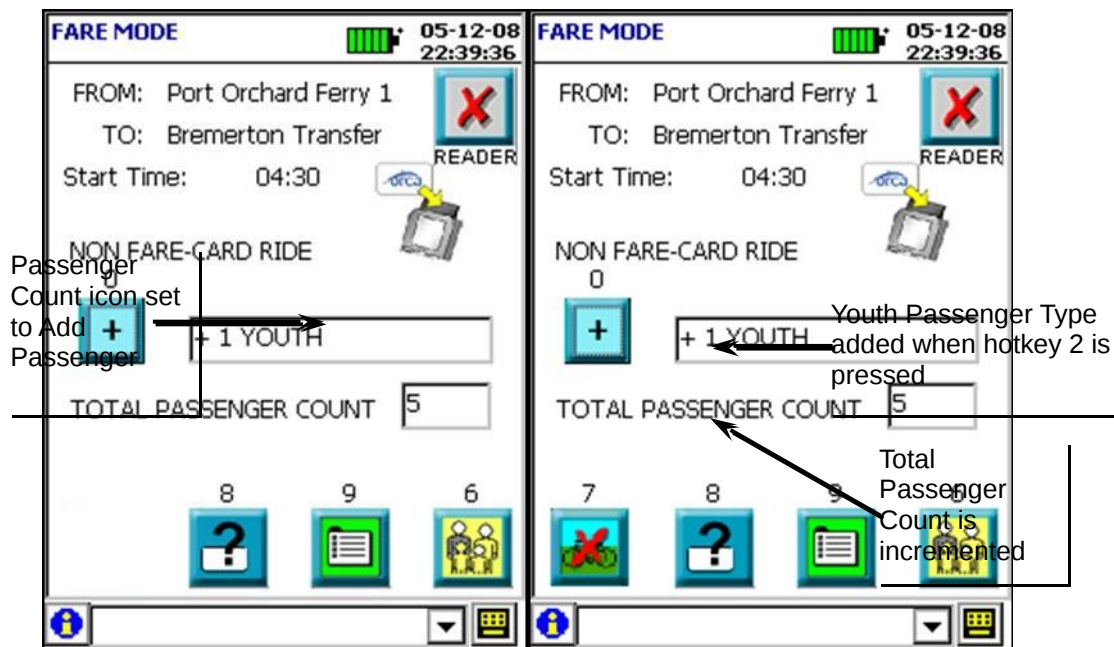














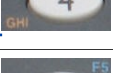



Figure 62: Non Fare-Card Ride example – Add Youth

32. Multiple passengers can be added or removed by pressing the relevant buttons multiple times.

**Note:** Increasing or reducing the **Non Fare-Card Ride** count increases or reduces the **Total Passenger Count**. **Total Passenger Count** is set to zero at the start of each new trip.

Table 2: Non Fare-Card Ride Keypad Button Reference and Passenger Type Chart

Keypad Number	Equivalent Keypad hotkey	Passenger Type
1		ADULT
2		YOUTH
3		REDUCED CASH
4		<a href="#">FREE RIDE UNDERPAYMENT</a>
5		<a href="#">FREE RIDE UNDERPAYMENT</a>
FN+1	 + 	PAPER TRANSFER
FN+2	 + 	PCA
FN+3	 + 	WHEELCHAIR
<a href="#">FN+4</a>	 + 	<a href="#">BICYCLE</a>
FN+5	 + 	CASH UPGRADE
Punctuation		SPECIAL SURVEY

## 3.11 Inquiry Mode

Passengers can present their fare cards and make inquiries about information stored on the fare cards.

To use the fare card inquiry:

1. While in **Fare Mode**, press the **8** hotkey or tap the **Inquiry** button.

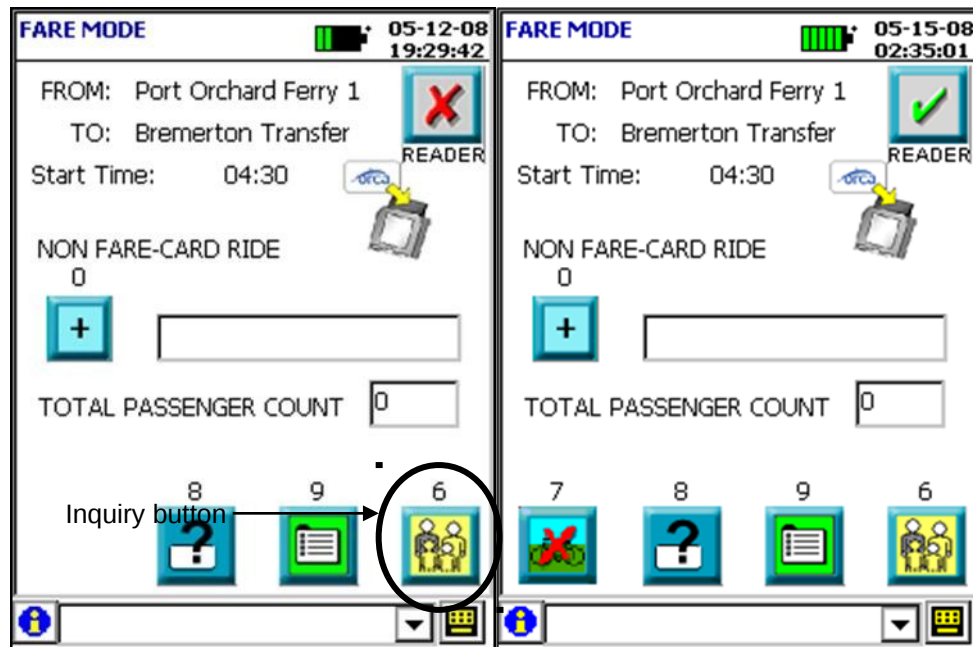


Figure 63: Fare Mode screen – Inquiry button

This will display the **Card Inquiry** screen.

2. Present a fare card to the reader.

The card details will be displayed in the various fields on the **Card Inquiry** screen:

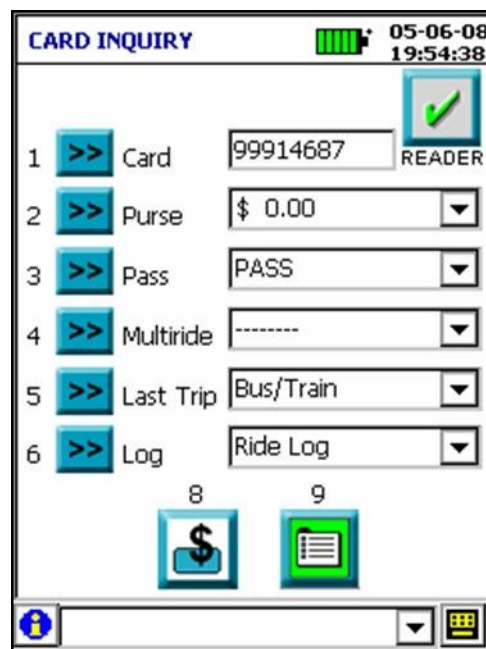


Figure 64: Card Inquiry screen

The details are displayed on the **Card Inquiry** screen with the **Card #** (number) field highlighted.

There are six different fields of information about the currently tagged card. The following example shows how to access the Pass details.

3. Use the Navigational Toggle Button to highlight the required pass then press the **Enter** hotkey to select it or tap the required item on the **Pass List**.

The Navigational Toggle up and down arrows can be used to move up and down to select different fields on the display screen. The right arrow is used to open a field list. The left and right arrows are used to move up and down the items in the opened list.

This is the **Field Inquiry** button for the Pass field – the same as pressing the related number key

The screenshot shows the 'CARD INQUIRY' screen with a status bar at the top displaying '05-06-08 19:55:57' and a battery icon. The screen contains six numbered fields, each with a '>>' button to its left. Field 1 'Card' has the value '99914687' and a 'READER' icon. Field 2 'Purse' has the value '\$ 0.00'. Field 3 'Pass' has the value 'PASS' and a dropdown arrow; its list is open, showing 'PASS' and 'PASS 2.00'. Field 4 'Multiride' has the value 'PASS 2.00'. Field 5 'Last Trip' has the value 'Bus/Train'. Field 6 'Log' has the value 'Ride Log'. At the bottom, there are two icons labeled '8' and '9', and a status bar with an information icon and a keyboard icon.

Use this button to open the list.

Select the item on the list that is to be viewed.

Figure 65: Card Inquiry – Pass Data Field

- To view details of the selected item, press the appropriate number hotkey or tap the related **Field Inquiry** button.

This will display the details screen for the selected field. In the following example, the Field Inquiry was made on the **Pass** field, so the **Pass Details** screen is displayed:

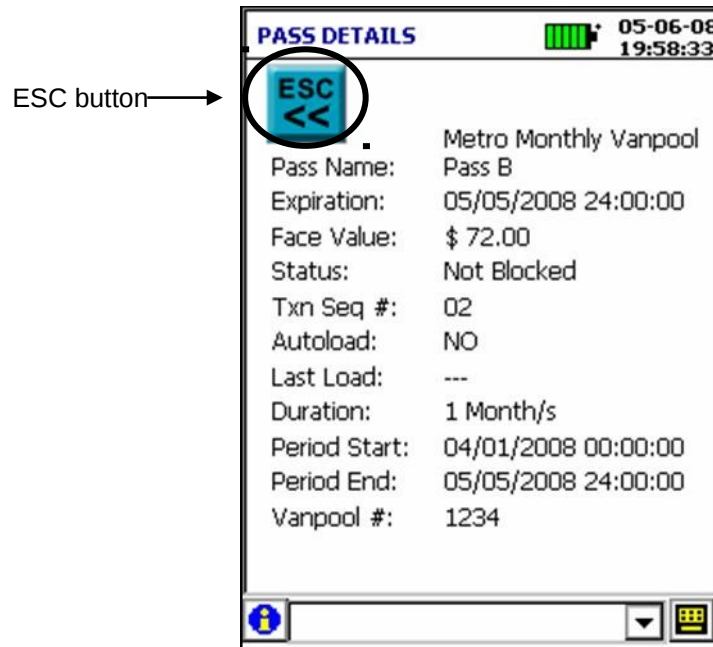


Figure 66: Pass Details

- When you have finished viewing the details screen, press the **ESC** hotkey or tap the **ESC** icon.

The display returns to the **Card Inquiry** screen with the same card details displayed.

- Follow steps 3 - 5 to view the details of other fields on the current card.

**Note:** The details of this card are cleared when another card is presented to the reader.

- To return to Fare Mode from the Card Inquiry, press the **8** hotkey or tap the **Fare Mode** button.

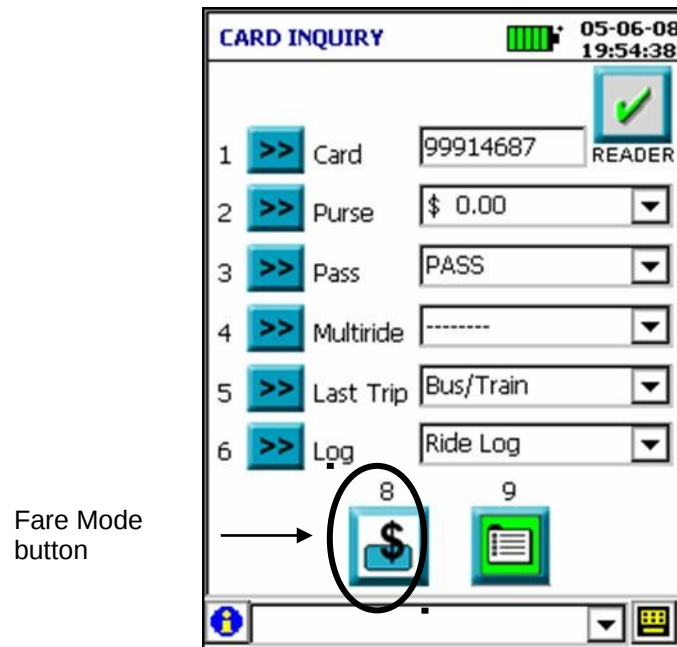


Figure 67: Inquiry screen – Fare mode button

Details of the inquired card are cleared and the display returns to the **Fare Mode** screen.

The following are examples of fare details screens.

The screenshot shows the 'CARD DETAILS' screen with a status bar at the top displaying '05-06-08 20:01:21' and a battery icon. The screen features an 'ESC <<' button at the top left. The card details are as follows:

Passenger Type:	YOUTH
Status:	NOT BLOCKED
Vehicle(WSF):	Unspecified
-----	
Version:	01
Issuer:	RFCS
Card #:	99914687
Lifecycle:	0
Type:	MIFARE_DESFIRE
Expiration:	04/29/2017 24:00:00
Format:	ERG_TRANSAP
Institution ID:	Unspecified

Card details

The screenshot shows the 'PURSE DETAILS' screen with a status bar at the top displaying '05-06-08 20:04:51' and a battery icon. The screen features an 'ESC <<' button at the top left. The purse details are as follows:

Balance:	\$ 5.00
Status:	Not Blocked
Provider:	1
-----	
Last Revalue:	05/06/2008
Amount:	\$ 205.00
-----	
Threshold	
Autoload:	Enabled
Last Load:	05/06/2008
Amount:	\$ 205.00
-----	
Periodic	
Autoload:	Disabled
Last Load:	---
Amount:	---

E-purse details

Figure 68: Card Inquiry examples - Card & E-purse Details



**PASS DETAILS** 05-06-08 19:58:33

**ESC** <<

Metro Monthly Vanpool

Pass Name: Pass B

Expiration: 05/05/2008 24:00:00

Face Value: \$ 72.00

Status: Not Blocked

Txn Seq #: 02

Autoload: NO

Last Load: ---

Duration: 1 Month/s

Period Start: 04/01/2008 00:00:00

Period End: 05/05/2008 24:00:00

Vanpool #: 1234

Pass details

**MULTI-RIDE DETAILS** 05-06-08 20:42:16

**ESC** <<

WSF Mukilteo-Clinton

Product: 10 Ride Return

Status: Not Blocked

Remaining: 10

Expiration: 07/30/2008 24:00:00

Origin: ---

Destination: ---

-----

Last Revalue: ---

Amount: \$ 0.00

-----

Autoload: Disabled

Last Load: ---

Amount: ---

-----

Txn Seq: 000001

Multi-ride details

Figure 69: Card Inquiry examples - Pass & Multi-ride Details

**LAST TRIP** 05-06-08 20:45:26

**ESC** <<

Status: Checked In

Agency: KCM

Started: 05/06/2008

Location: Vanpool 1234

Product 1: -----

Product 2: Period/MultiRide

Purse Last: \$ 0.00

Trip Total: \$ 0.00

-----

Last ded: 05/06/2008

Xfr Expiration: 05/06/2008

Last TFC: \$ 0.00

Total TFC: \$ 0.00

Ticket details

**LOG DETAILS** 05-15-08 01:37:37

**ESC** << >

**RIDE LOG 2 of 7**

Validation: Flat Fare Checked In

Date/Time: 05/14/2008 04:55:19

Agency: KCM

Location: Vanpool 1234

-----

Txn Type: Pass Use

Txn Value: \$0.00

-----

Product 1: -----

Balance: -----

Product 2: PASS

Balance: 05/30/2008 24:00:00

-----

Deducted: \$0.00

Log details

Figure 70: Card Inquiry examples - Ticket & Log Details



## 3.12 Adjust Volume

To adjust the volume on the PFTP device:

- At either the **Fare Mode** or the **Start Trip** screen, press the **9** hotkey or tap the **Options** button.

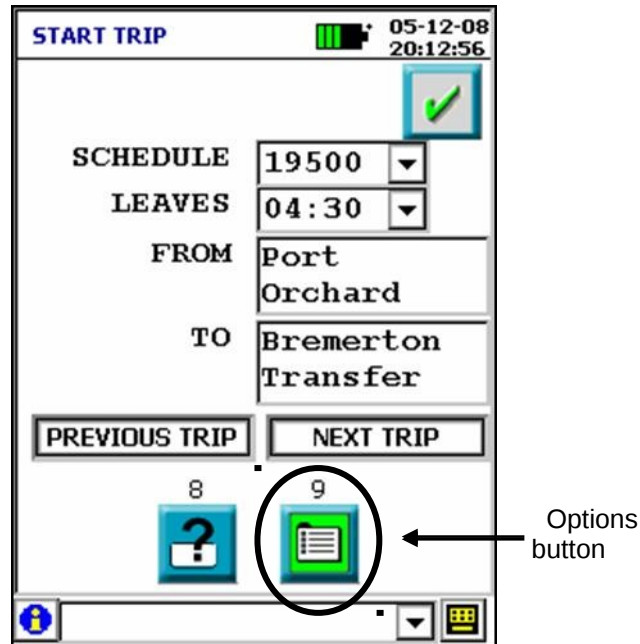


Figure 71: Start Trip screen – Options button

The **Trip Options** screen is displayed.

- Press the **4** hotkey or tap the **Adjust Volume** button.

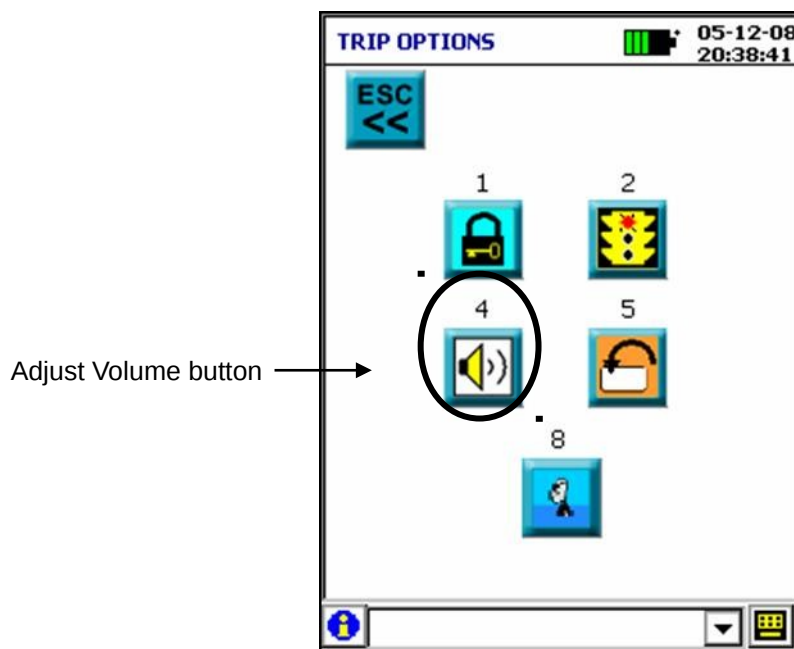


Figure 72: Options screen – Adjust Volume button

The **Volume Control** screen is displayed with the slider adjusted to the current volume setting.

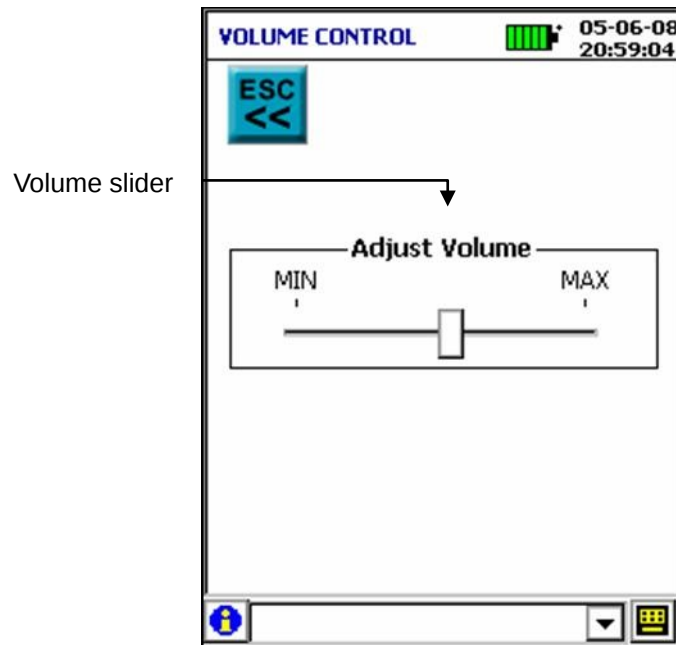


Figure 73: Adjust Volume screen

10. Use the stylus to drag the slider on the screen to adjust the volume.

**Note:** The maximum and minimum volume levels are configured in CD. When the operator ends the shift, the volume is reset to the default value.

11. When the desired volume is set, press the **ESC** hotkey or tap the **ESC** icon to return to the previous screen. The new volume setting will be saved.

## 3.13 Lock/Unlock Device

The PFTP can be locked to stop unauthorized use. The PFTP also has an Auto Lock, which locks the device automatically when the device has not been used for a preset amount of time.

### 3.13.1 Locking the PFTP Device

To lock the PFTP device:

1. At either the **Fare Mode** or the **Start Trip** screen, press the **9** hotkey or tap the **Options** button.

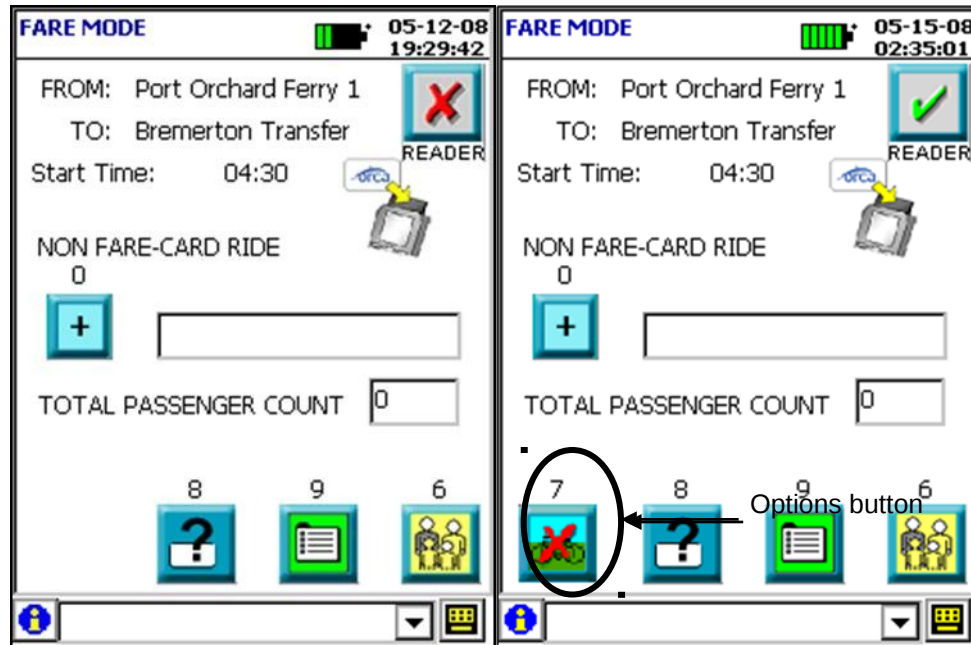


Figure 74: Fare mode screen – Options button

The relevant options screen is displayed.

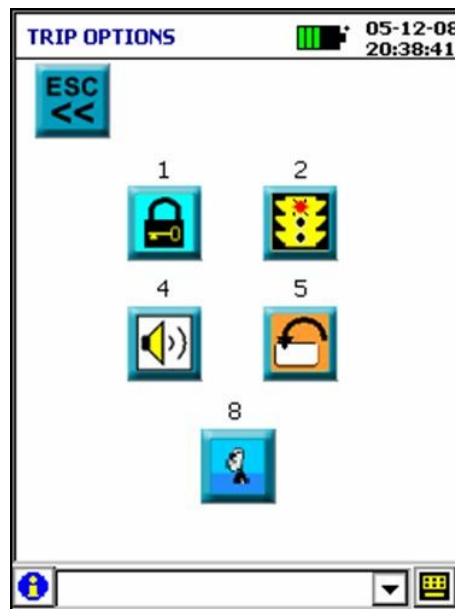


Figure 75: Trip Options screen

To cancel from the options screen, press the **ESC** hotkey or tap the **ESC** icon. The display will return to the previous screen (**Start Shift** or **Fare Mode**).

2. Press the **1** hotkey or tap the **Lock** button.

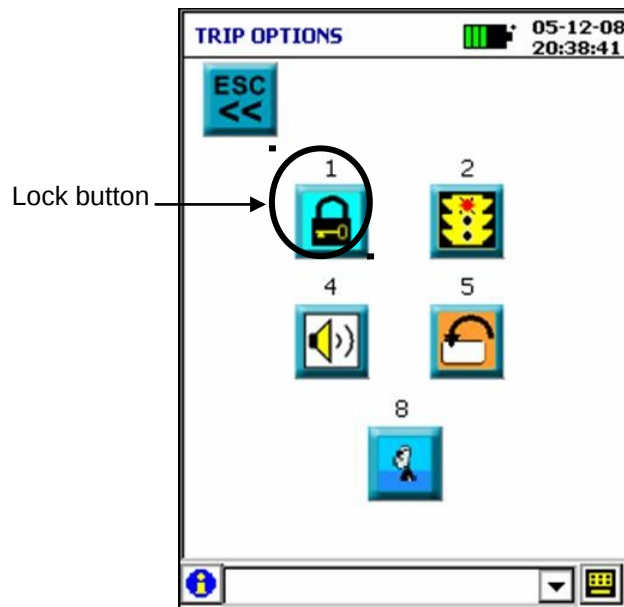


Figure 76: Trip Options screen – Lock button

The device will now be locked from use, and the **Device Locked** screen will be displayed.

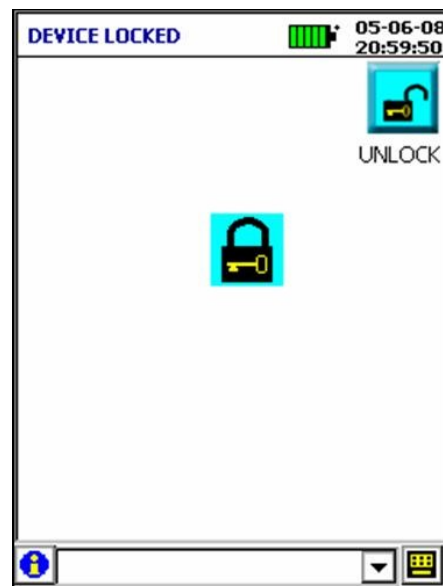


Figure 77: Device Locked screen

### 3.13.2 Unlocking the PFTP Device

To unlock the PFTP device:

3. At the **Device Locked** screen, press the **Enter** key (or tap the **Unlock** button).

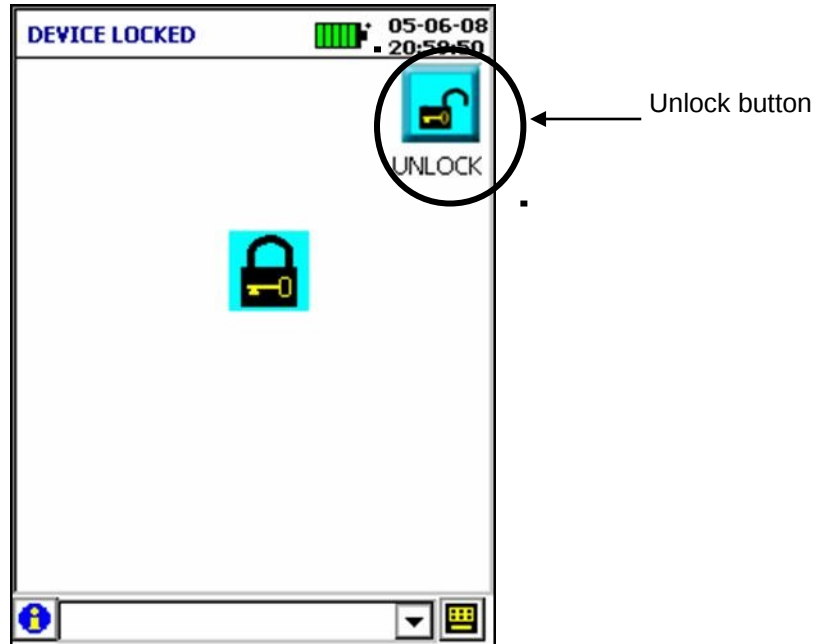


Figure 78: Device Locked screen – Unlock button

The **Log In** screen will be displayed.



Figure 79: Log in screen

4. Fill in your **Name** and **Password**.
5. Press the **Enter** hotkey or tap the **Check**.

The display returns to the screen from which the device was locked.

### 3.14 End Trip

To end the trip (after the ferry has sailed):

1. At the **Fare Mode** screen, press the **9** hotkey or tap the **Options** button.

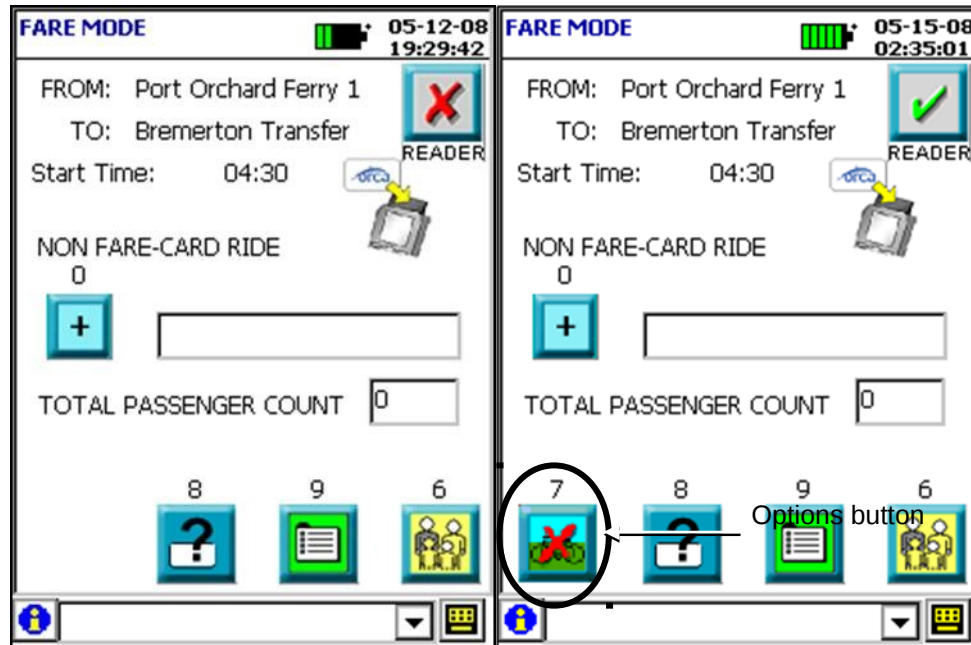


Figure 80: Fare Mode screen – Options button

The **Trip Options** screen is displayed.

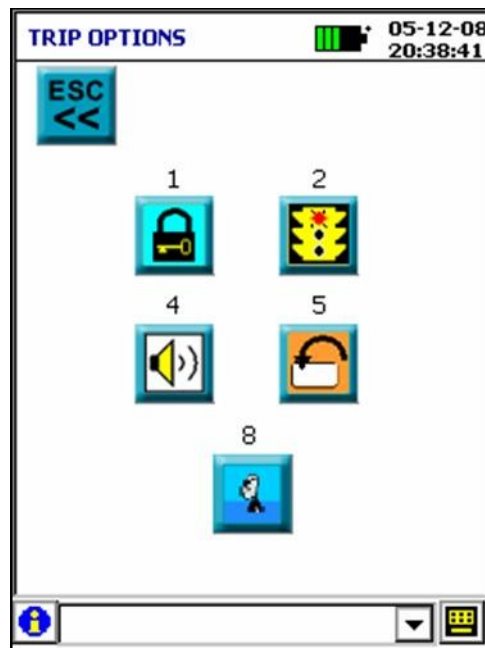


Figure 81: Trip Options screen

To cancel from the **Trip Options** screen, press the **ESC** hotkey or tap the **ESC** icon. The display will return to the **Fare Mode** screen.

2. Press the **2** hotkey or tap the **End Trip** button.

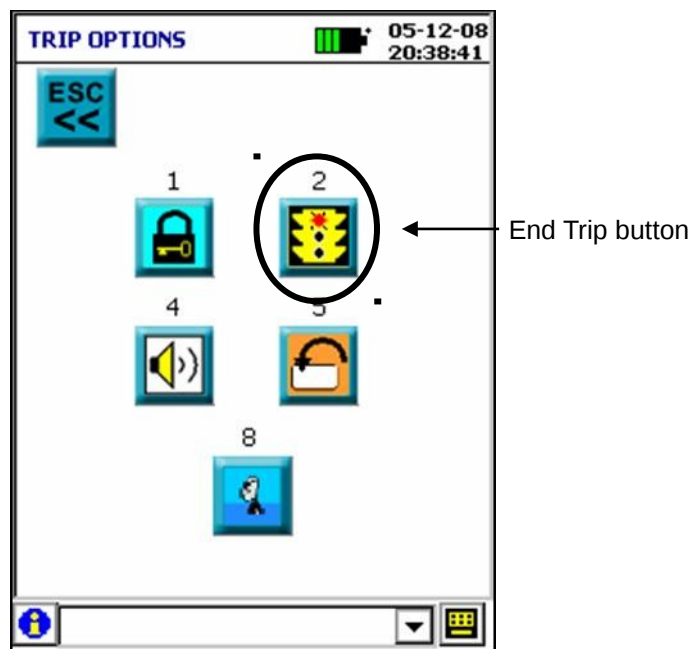


Figure 82: Trip Options screen – End Trip button

The **End Trip** screen is displayed.

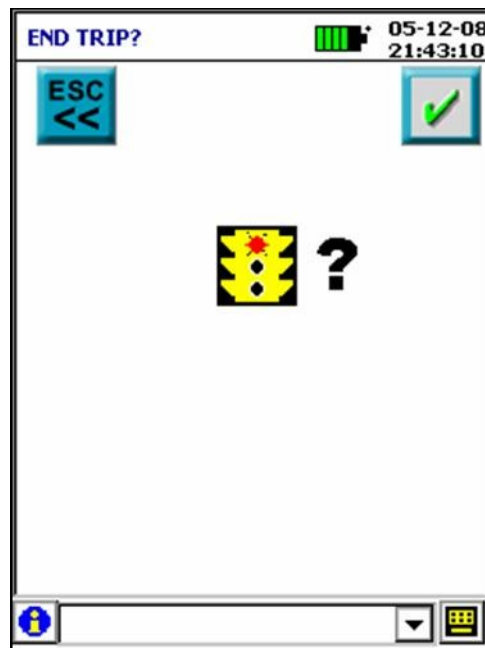


Figure 83: End Trip confirmation screen

To cancel from the **End Trip** screen, press the **ESC** hotkey or tap the **ESC** icon. The display will return to the **Trip Options** screen.

3. At the **End Trip** screen, press the **Enter** hotkey or tap the **Check** icon.

The device will connect to the DAC.



Figure 84: Data Transfer Connecting screen

The trip is ended and the **Data Transfer** screen displays while the fare UD is uploaded to the DAC. If the PFTP fails to connect, the **Data Transfer Failed** screen displays.





CD/UD Transfer Successful



Data Transfer Failed

Figure 85: Data Transfer screen – Success and Failure examples

The **Start Trip** screen displays with the same terminal, schedule, and destinations as the previous trip. The next leaving times are displayed.

### 3.15 End Shift

When all the trips shown in the schedule are completed:

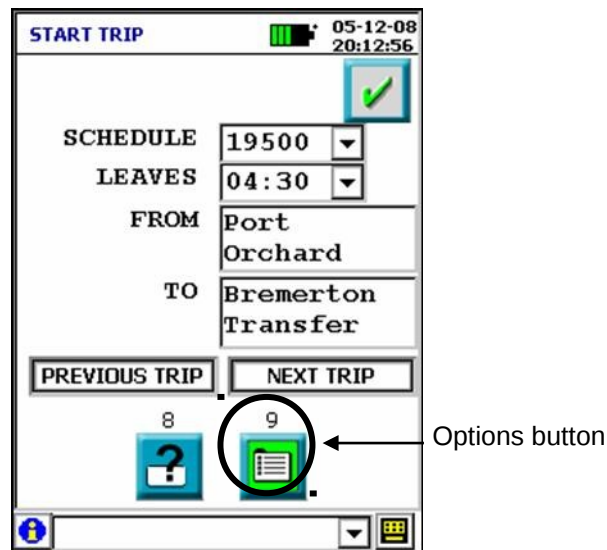


Figure 86: Start Trip screen – Options button

- At the **Start Trip** screen, press the **9** hotkey or tap the **Options** button.

The **Shift Options** screen is displayed.

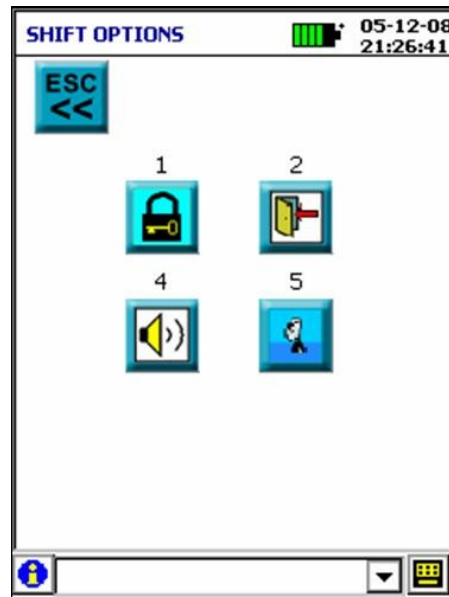


Figure 87: Shift Options screen

If you need to cancel from the **Shift Options** screen, press the **ESC** hotkey or tap the **ESC** icon. The display will return to the **Fare Mode** screen.

- Press the **2** hotkey or tap the **End Shift** button.

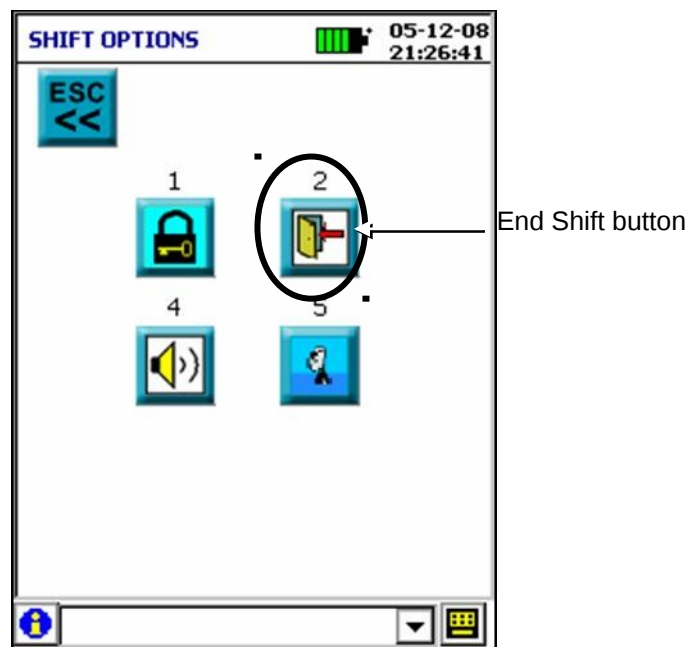


Figure 88: Shift Options screen – End Shift button

The **End Day?** screen is displayed.

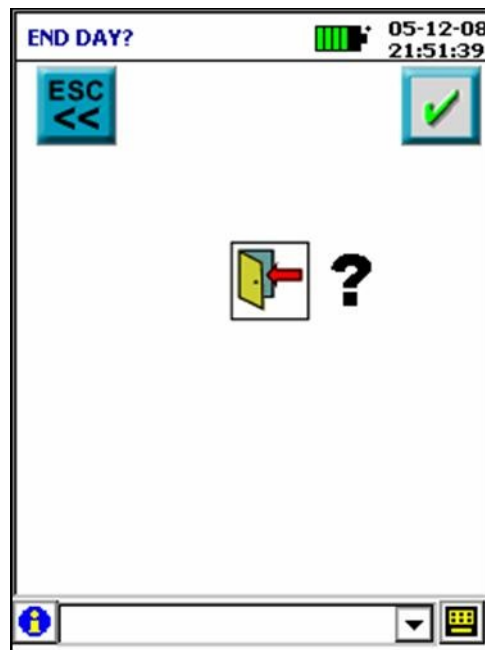


Figure 89: End Shift confirmation screen

To cancel from the **End Day?** screen, press the **ESC** hotkey or tap the **ESC** button. The display will return to the **Trip Options** screen.

6. At the **End Day?** screen, press the **Enter** hotkey or tap the **Check** icon.

The **Log In** screen will be displayed.



## 4 Maintenance Mode

For an operator to Log In to Maintenance Mode, the PFTP device will have to be powered on. Press the **ESC** hotkey or tap the **ESC** button. The display will return to the **Log In** screen.

7. At the **Log In** screen, enter your Name and Password.
8. Press the **Select Role** hotkey or tap the **Select Role** icon.

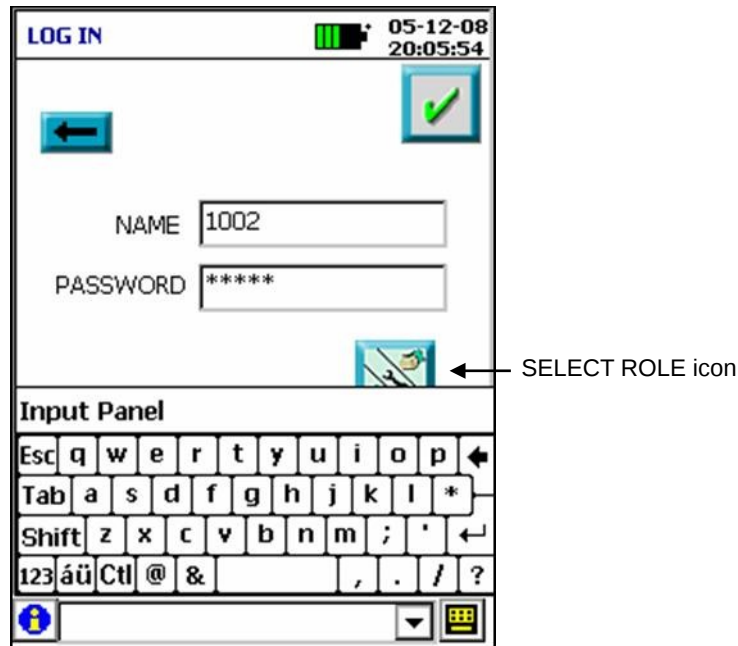


Figure 90: Log in screen – Select Role button

The **Select Role** screen is displayed.

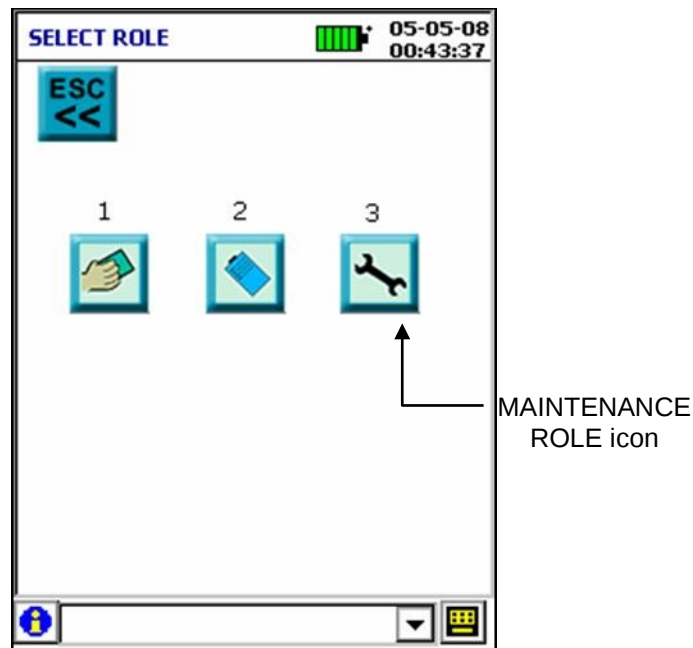


Figure 91: Select Role screen – Maintenance Role button

9. Press the **3** hotkey or tap the **Maintenance Role** icon.

The **Maintenance** screen displayed.

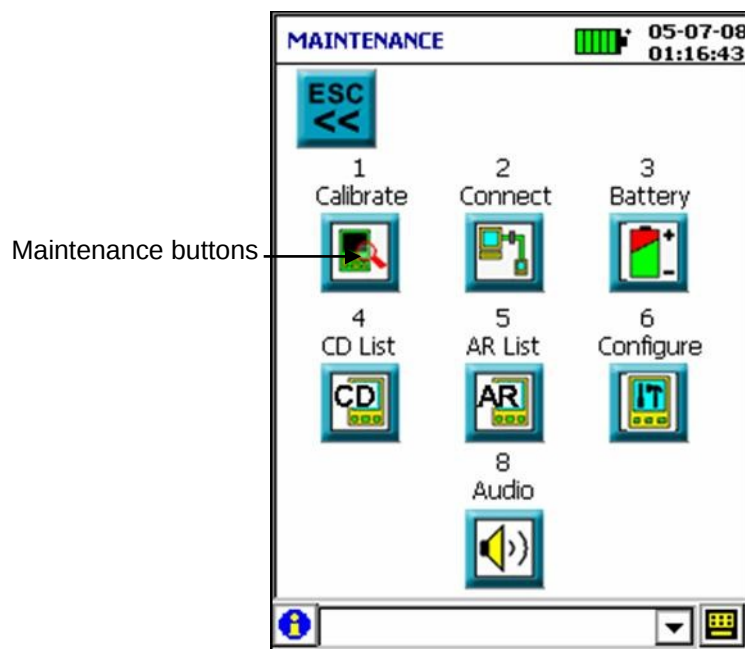


Figure 92: Maintenance screen – Maintenance buttons

10. Press a number hotkey that corresponds to the required task or tap the required button with the stylus.

## 4.1 Maintenance Mode Example Screens

This section shows examples of the Maintenance screens that are displayed on the PFTP.

### 4.1.1 Calibrate

This screen is a control panel where you can change general settings for your use of the PFTP.

Press the **Calibrate** hotkey



or tap the **Calibrate** button

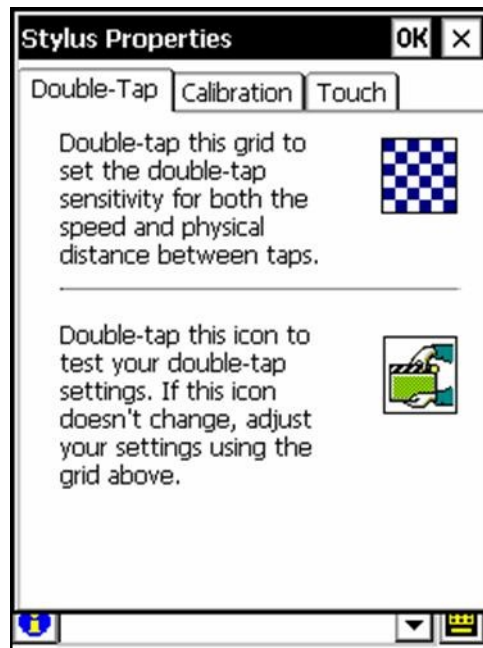


Figure 93: Calibrate button and Settings change area

### 4.1.2 Forced Connection

This function allows maintainers to force a connection to the DAC, to check that data transfer can take place to and from the device.

Press the **Connect** hotkey



or tap the **Connect** button



Figure 94: Connect button and Data Transfer screen

### 4.1.3 Battery Configuration

The **Battery** tab of the **Power Properties** screen shows the status for the device battery and for the backup battery.

Press the **Battery** hotkey



or tap the **Battery** button

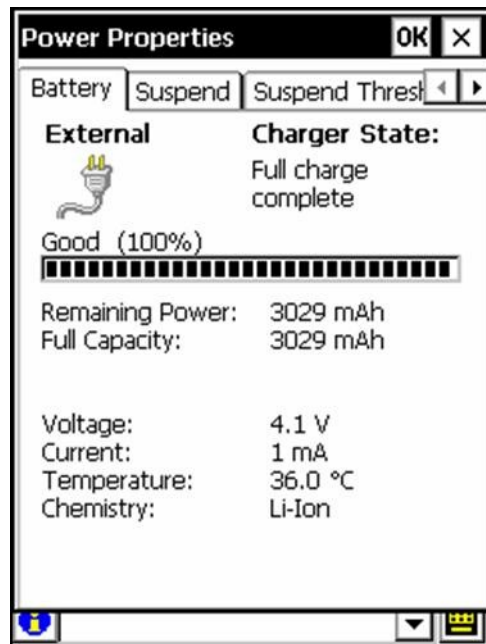


Figure 95: Battery button and Power Properties screen – Battery tab

There are a variety of power-related settings in these tabs, but the defaults for those settings should be effective for regular use.



#### 4.1.4 Configuration Data (CD) List

The **CD Listing** screen provides a list of all Configuration Data details for the current version of the CD on the PFTP.

Press the **CD List** hotkey



or tap the **CD List** button

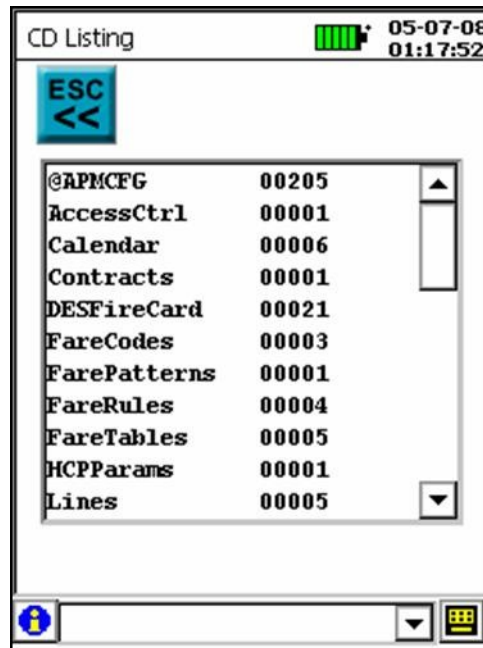


Figure 96: CD List button and CD Listing screen

### 4.1.5 Audit Registers (AR) List

The **Audit Register** screen provides an audit report of all transactions that have taken place on the PFTP.

Press the **AR List** hotkey



or tap the **AR List** button

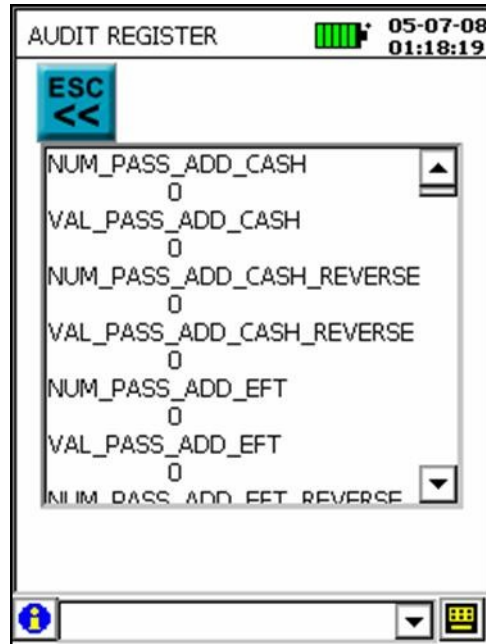


Figure 97: AR List button and Audit Registers screen

## 4.1.6 Device Configuration

The **Configuration** screen provides information about the current configuration settings for the PFTP.

Press the **Configure** hotkey



or tap the **Configure** button

A screenshot of a handheld device's 'CONFIGURATION' screen. The screen has a title bar with 'CONFIGURATION', a battery status icon, and a timestamp '05-05-08 07:38:40'. The main area contains several fields: 'Prog ID' (dropdown menu showing 'KCM-VANPOO'), 'Van #' (text field with '1234'), 'ESN' (text field with '00C80000'), 'Machine ID' (text field with '0000000004'), 'Location ID' (text field with '0134227822'), 'SC IP Address' (four text fields with '192', '168', '4', '2'), 'Wireless' (checked checkbox), 'Modem Connection' (unchecked checkbox), 'Serial Connection' (unchecked checkbox), and 'Ethernet Connection' (unchecked checkbox). There are 'ADD' and 'DELETE' buttons next to the 'Wireless' checkbox. At the bottom, there is a dropdown menu showing 'SeattleCE2' and a keyboard icon.

Figure 98: Configure button and Configuration screen

### 4.1.7 Audio Control

The **Volume** tab allows the volume to be set for audio indicators on the device. Sound indicators for Events, Applications, and Notifications can be turned on or off using the checkboxes.

Press the **Audio** hotkey



or tap the **Audio** button

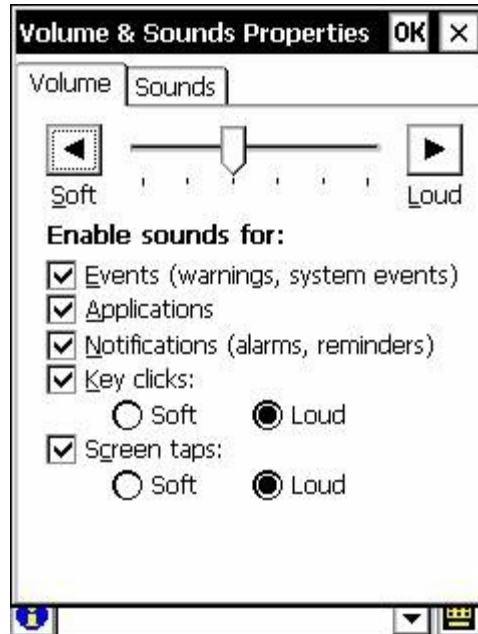


Figure 99: Audio button and Volume & Sounds screen – Volume tab

The **Sounds** tab allows alternative sound options to be selected on the PFTP.

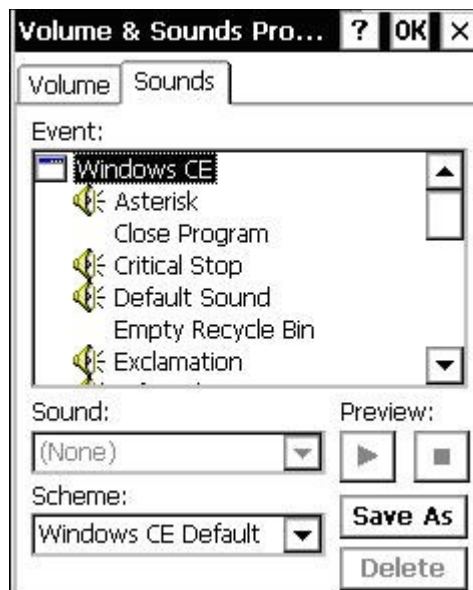


Figure 100: Volume & Sounds screen – Sounds tab

## 4.2 Exit Maintenance Mode

To exit Maintenance mode:

11. Press the **ESC** hotkey or tap the **ESC** button.

The display returns to the **Logon** screen.

## 5 Supervisor Mode

For an operator to Log In to Supervisor Mode, the PFTP device will have to be powered on. Press the **ESC** hotkey or tap the **ESC** button. The display will return to the **Log In** screen.

12. At the **Log In** screen, enter your Name and Password.

13. Press the **Select Role** hotkey or tap the **Select Role** icon.

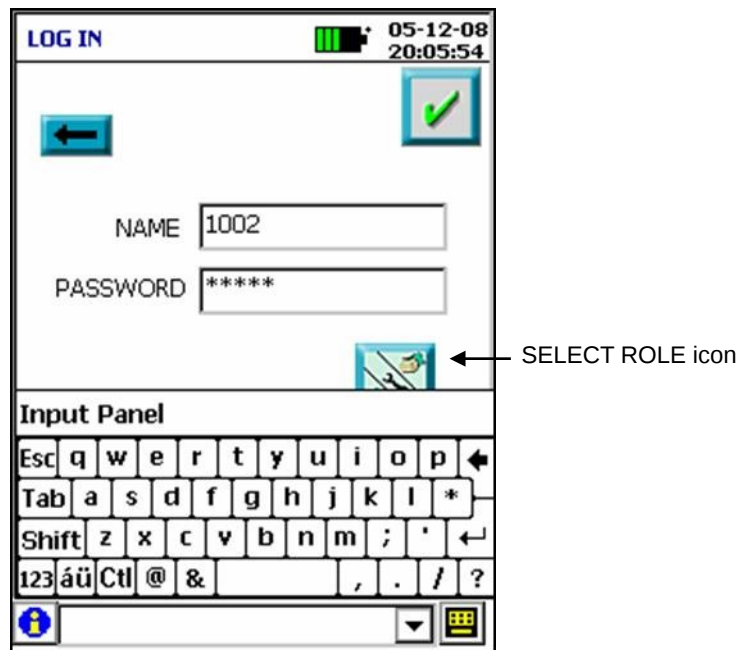


Figure 101: Log In screen

The **Select Role** screen is displayed.

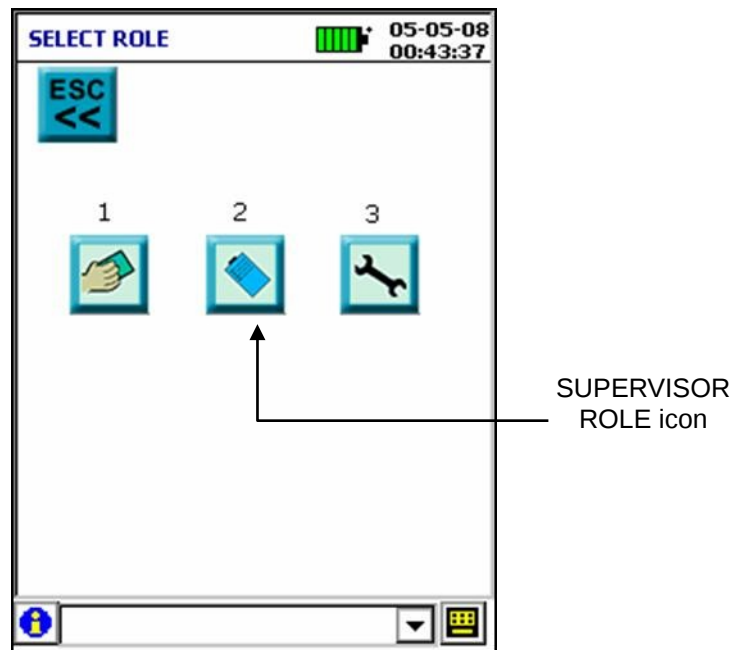


Figure 102: Select Role screen – Supervisor Role button

14. Press the **2** hotkey or tap the **Supervisor Role** icon.

The **Supervisor** screen displayed.

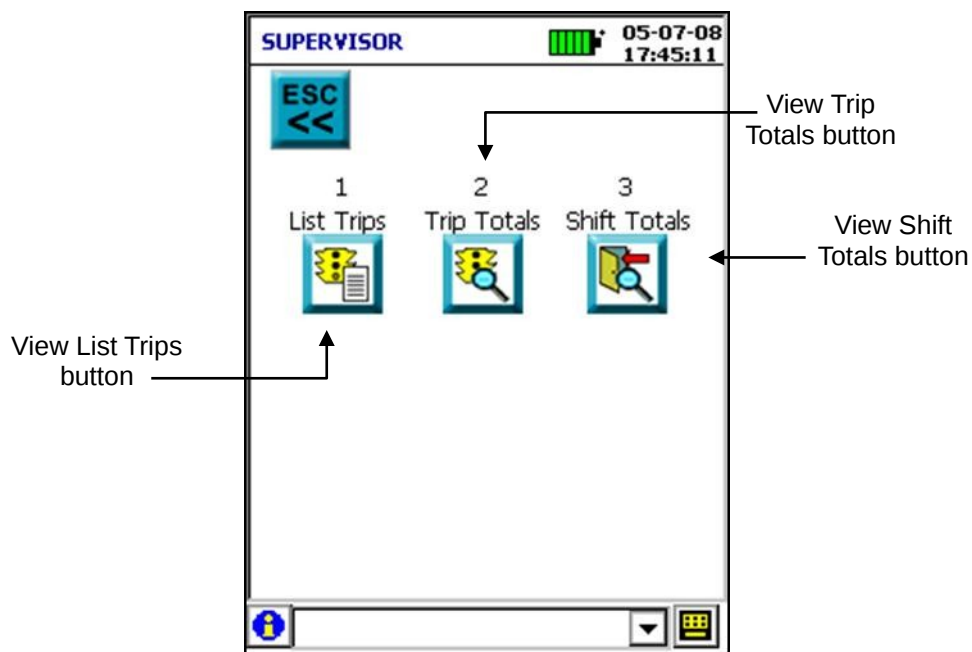


Figure 103: Supervisor screen

15. Press a number hotkey that corresponds to the desired task, (**1**, **2** or **3**) or tap the required button on the display screen.

## 5.1 Examples of Supervisor Screens

This section shows examples of the Supervisor screens that are displayed on the PFTP.

### 5.1.1 View Trips

This screen displays a list of the trips for the current shift.

Press the **List Trips** hotkey



or tap the **List Trips** button

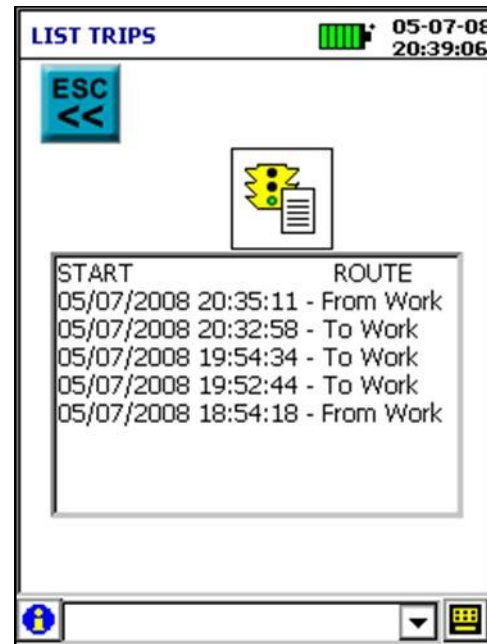


Figure 104: List Trips button and List Trips screen



### 5.1.2 View Trip Totals

The **Trip Totals** screen shows the total fares and total reversed fares for the current trip.

Press the **Trip Totals** hotkey



or tap the **Trip Totals** button

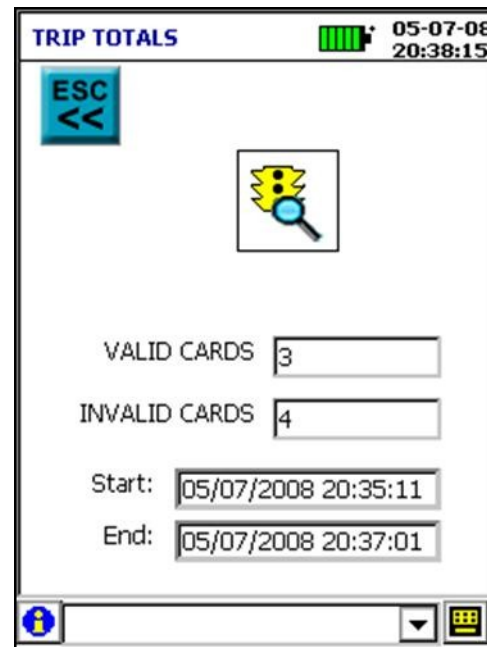


Figure 105: Trip Totals button and Trip Totals screen

### 5.1.3 View Shift Totals

The **Shift Totals** screen shows the total fares and total reversed fares for all trips on the current shift.

Press the **Shift Totals** hotkey



or tap the **Shift Totals** button

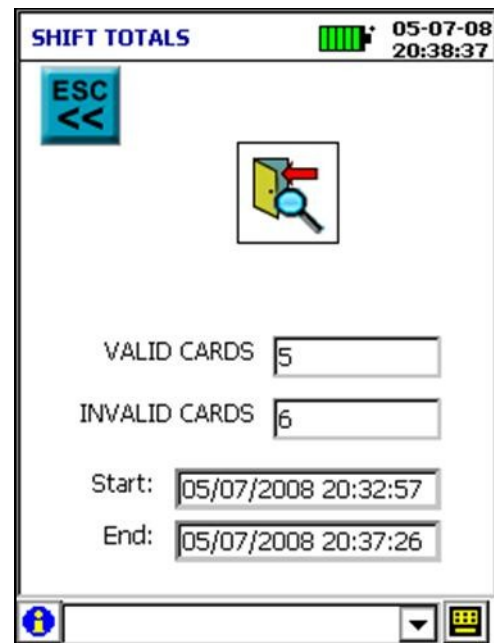


Figure 106: Shift Totals button and Shift Totals screen

## 5.2 Exit Supervisor Mode

To exit Supervisor mode:

16. Press the **ESC** hotkey or tap the **ESC** icon.

The display returns to the **Log In** screen



## 6 Troubleshooting

- [PFTP Locks Up or otherwise Ceases to Operate](#)

[If PFTP stops responding to keypad or keyboard input, reset PFTP by holding down the \*\*Enter\*\* and \*\*Blue FN\*\* keys until the screen flashes. This will cause the underlying operating system to reboot, restarting the PFTP program.](#)

- Device will not restart

If the PFTP will not start, the reason could be that the batteries may be discharged. Recharge the batteries by placing the device into the cradle provided until the batteries are fully recharged. When the battery is fully recharged, the Battery Charge Indicator at the top of the screen will be highlighted all the way across to the + symbol. In normal use, battery charge should be checked periodically and action taken to avoid situations in which the batteries become fully discharged.

## 7 Error Messages

The following error messages are generated when conditions exist that relate to the PFTP. Action must be taken as described on the screens to rectify the condition that caused the error message to appear.

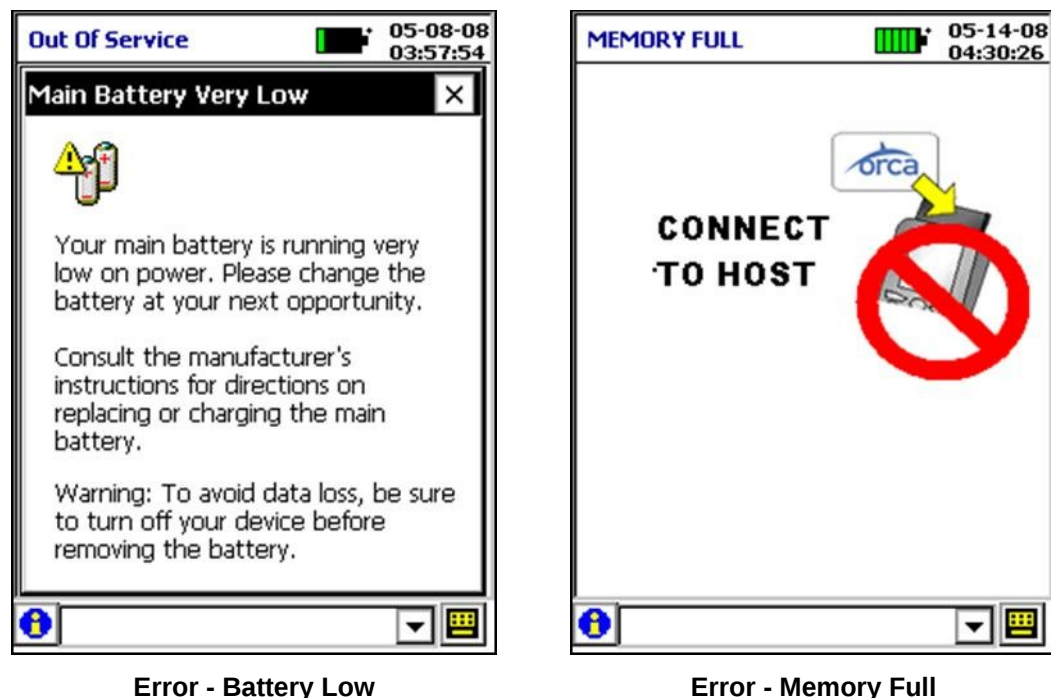


Figure 107: Error screen examples – Battery Low & Memory Full

- Battery Low Error Message

Recharge the batteries by placing the device into the cradle provided until the batteries are fully recharged. When the battery is fully recharged, the Battery Charge Indicator at the top of the screen will be highlighted all the way across to the + symbol. In normal use, battery charge should be checked periodically and action taken to avoid situations in which the batteries become fully discharged.

- Memory Full Error Message

Placing the device into the cradle will trigger an automatic uploading of data or selecting the Data connection icon from the Trip Option screen or the Connect button from the Maintenance screen (must have Maintenance Role).



## Appendix A Terminology

This section contains lists of acronyms, abbreviations and terms used within this document.

### A.1 Acronyms and Abbreviations

Table 3 contains relevant acronyms and abbreviations that are specific to the use of the PFTP device by operators. In general, industry standard acronyms and abbreviations are not defined in this table.

**Table 3: Acronyms and Abbreviations**

Acronym or Abbreviation	Definition
AFC	Automated Fare Collection
AR	audit register
CD	Configuration Data
DAC	Data Acquisition Computer
ERG	ERG Transit Systems (USA), Inc.
ESB	ERG Service Bureau
KT	Kitsap Transit
ORCA	One Regional Card for All
PFTP	Portable Fare Transaction Processor
PSNGR	Passenger
RFCS	Regional Fare Coordination System
UD	Usage Data

### A.2 Terms

Table 4 contains the terms that are specific to ERG. In general, industry standard terms are not defined in this table.

**Table 4: Terms**

Term	Definition
Automated Fare Collection	The overall process for collecting and correlating fares and transit products for the Regional Fare Coordination System (RFCS).
card	Refers to a contactless smart card. The medium used by a cardholder to store applications.
Clearinghouse	The central revenue control and settlement system.
configuration data	A generic term for data that is sent to a device or host to configure its functionality.
Data Acquisition Computer	A central computer that collects the data from on-board, portable, and stand-alone FTPs or other designated RFCS equipment for transfer to the Clearinghouse and provide the relevant Agency with duplicates of the data files transferred to the Clearinghouse.

Term	Definition
fare card	A nondisposable smart card for transit use.
multi-ride	A prepaid product that provides the cardholder with the right to travel for a specific number of journeys. For example, a ten-ride product offers the cardholder ten journeys. See <i>also</i> e-purse and pass.
operator	The Agency staff member, ESB staff member, or any authorized person using the RFCS equipment.
pass	A card product that permits unlimited journeys by the cardholder on a specific transit operator within a specific time period.
product	A form of contract between the product issuer and cardholder. A generic term for the collection of specific product types, i.e. multiride, pass, and e-purse products.
e-purse	An electronic representation of the monetary value on a fare card.
revalue	Revalue of a card comprises the following operations: <ul style="list-style-type: none"><li>• Initial valuation of a fare card with a pass, multiride product, or stored value</li><li>• Addition of a new pass, multi-ride product, or stored value to a fare card</li><li>• Extension of the period of time for which a pass is valid</li><li>• Addition of further rides to a multi-ride product</li></ul>
timeout	A period of inactivity that results in a device reverting to the previous screen or logging off the operator.
usage data	A generic term for data that is generated when a transaction or event occurs. For example, a transaction record is a type of usage data.



## Appendix B Lists of Tables and Figures

### B.1 [List of Tables](#)

Table 1: Display Screen Icons and Keypad Button Reference Chart.....	8
Table 2: Non Fare-Card Ride Keypad Button Reference and Passenger Type Chart.....	51
Table 3: Acronyms and Abbreviations.....	89
Table 4: Terms.....	89

### B.2 List of Figures

Figure 1: PFTP Training Mode indicator – Fare Mode example.....	6
Figure 2: Portable Fare Transaction Processor (PFTP).....	7
Figure 3: Example Display Screen.....	12
Figure 4: Keypad and Button Relationship.....	13
Figure 5: Screen Keyboard Icon.....	14
Figure 6: Keyboard display – Lower Case.....	14
Figure 7: Keyboard display – Upper Case.....	14
Figure 8: Keyboard display – One Upper/Rest Lower case.....	14
Figure 9: Keyboard display – Special Characters Lower Case.....	14
Figure 10: Keyboard display – Special Characters Upper Case.....	15
Figure 11: Directional Keys.....	15
Figure 12: Power hotkey and Power symbol.....	18
Figure 13: Initializing Screen.....	18
Figure 14: Connecting to Host screen.....	19
Figure 15: Host Connection Success screen.....	19
Figure 16: Host Connection Fail.....	20
Figure 17: Data Transfer screen.....	20
Figure 18: Application Upgrade screen.....	21
Figure 19: Log In screen.....	21
Figure 20: Icon for Owner Information.....	22
Figure 21: Owner Information menu.....	23
Figure 22: Owner Information screen.....	23
Figure 23: Escape from Owner Information screen.....	24
Figure 24: Login screen - Name.....	25
Figure 25: Login screen - Password.....	26
Figure 26: Login screen – Password masked by asterisks.....	26
Figure 27: Login screen – Check Button acts as Enter key.....	27
Figure 28: Invalid Login screen.....	28
Figure 29: Start Trip screen.....	28
Figure 30: Select Role icon.....	29
Figure 31: Select Role buttons.....	30
Figure 32: Invalid Role screen.....	30
Figure 33: Start Trip screen options.....	31
Figure 34: Confirm Trip Information Options.....	32
Figure 35: Fare Mode screen.....	32
Figure 36: PFTP in Fare Mode.....	33
Figure 37: Card Reader Off indicator.....	34
Figure 38: Card Reader On indicator.....	34
Figure 39: Card Read Result.....	35
Figure 40: Return to Fare Mode display.....	35
Figure 41: Transaction example.....	36
Figure 42: Transaction Type Indicator examples.....	37

Figure 43: Transaction examples by Passenger Type.....	37
Figure 44: Transaction examples by Payment Type.....	38
Figure 45: Transaction examples with Warnings.....	38
Figure 46: Invalid Transaction examples.....	39
Figure 47: Amount Owed to Complete Transaction example.....	40
Figure 48: Fare Mode screen – Multiple Fare button.....	41
Figure 49: Multiple Passenger screen.....	41
Figure 50: Multiple Passenger Fare example.....	42
Figure 51: Clear Entries on Multiple Passenger screen.....	43
Figure 52: Check button to accept or use Enter key.....	43
Figure 53: Multiple Passenger Fare displayed.....	44
Figure 54: Multiple Passenger Fare Transaction example.....	45
Figure 55: Options button on Fare screen.....	46
Figure 56: Options screen Buttons.....	47
Figure 57: Options screen – Reverse Transaction button.....	47
Figure 58: Reverse Transaction message.....	48
Figure 59: Reverse Transaction examples.....	48
Figure 60: Passenger Count Increase icon.....	49
Figure 61: Passenger Count Reduce icon.....	50
Figure 62: Non Fare-Card Ride example – Add Youth.....	50
Figure 63: Fare Mode screen – Inquiry button.....	52
Figure 64: Card Inquiry screen.....	52
Figure 65: Card Inquiry – Pass Data Field.....	53
Figure 66: Pass Details.....	54
Figure 67: Inquiry screen – Fare mode button.....	55
Figure 68: Card Inquiry examples - Card & E-purse Details.....	55
Figure 69: Card Inquiry examples - Pass & Multi-ride Details.....	56
Figure 70: Card Inquiry examples - Ticket & Log Details.....	56
Figure 71: Start Trip screen – Options button.....	57
Figure 72: Options screen – Adjust Volume button.....	57
Figure 73: Adjust Volume screen.....	58
Figure 74: Fare mode screen – Options button.....	59
Figure 75: Trip Options screen.....	59
Figure 76: Trip Options screen – Lock button.....	60
Figure 77: Device Locked screen.....	60
Figure 78: Device Locked screen – Unlock button.....	61
Figure 79: Log in screen.....	61
Figure 80: Fare Mode screen – Options button.....	62
Figure 81: Trip Options screen.....	63
Figure 82: Trip Options screen – End Trip button.....	63
Figure 83: End Trip confirmation screen.....	64
Figure 84: Data Transfer Connecting screen.....	64
Figure 85: Data Transfer screen – Success and Failure examples.....	65
Figure 86: Start Trip screen – Options button.....	65
Figure 87: Shift Options screen.....	66
Figure 88: Shift Options screen – End Shift button.....	66
Figure 89: End Shift confirmation screen.....	67
Figure 90: Log in screen – Select Role button.....	69
Figure 91: Select Role screen – Maintenance Role button.....	70
Figure 92: Maintenance screen – Maintenance buttons.....	70
Figure 93: Calibrate button and Settings change area.....	71
Figure 94: Connect button and Data Transfer screen.....	72
Figure 95: Battery button and Power Properties screen – Battery tab.....	72
Figure 96: CD List button and CD Listing screen.....	73

Figure 97: AR List button and Audit Registers screen.....	74
Figure 98: Configure button and Configuration screen.....	75
Figure 99: Audio button and Volume & Sounds screen – Volume tab.....	76
Figure 100: Volume & Sounds screen – Sounds tab.....	76
Figure 101: Log In screen.....	79
Figure 102: Select Role screen – Supervisor Role button.....	80
Figure 103: Supervisor screen.....	80
Figure 104: List Trips button and List Trips screen.....	81
Figure 105: Trip Totals button and Trip Totals screen.....	82
Figure 106: Shift Totals button and Shift Totals screen.....	82
Figure 107: Error screen examples – Battery Low & Memory Full.....	87

## Appendix C References

- [1] Contract 229944 (April 29, 2003)  
Division III: Equipment Specifications.
- [2] SEA-01052  
Portable Fare Transaction Processor (DR 105B) - Functional Specification

## Appendix D Document History

Revision	Revision Date	Reason for Issue	Author
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